

American

FORESTS

JANUARY, 1957

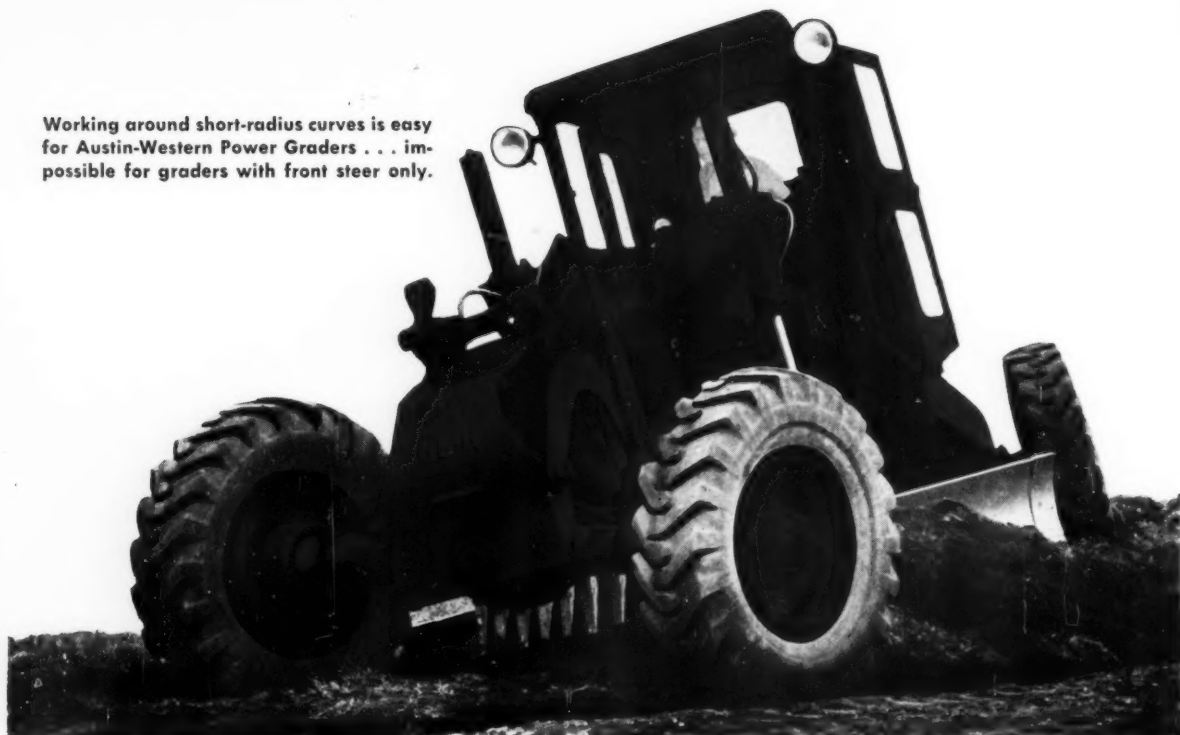
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LEARNING UP THE CLAIMS

Progress Under Public Law 167 . . . See page 35

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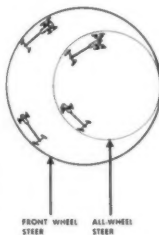
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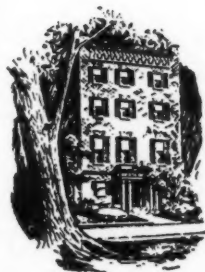
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Art Director

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Cover • Colored areas on map indicate acreage being processed under the mining law, Public Law 167.



The AFA

The American Forestry Association, publishers of *American Forests*, is a national organization—independent and non-political in character—for the advancement of intelligent management and use of forests and related resources of soil, water, wildlife and outdoor recreation. Its purpose is to create an enlightened public appreciation of these resources and the part they play in the social and economic life of the nation. Created in 1875, it is the oldest national forest conservation organization in America.

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Forest Forum

Foresters for the Future

EDITOR:

In its July 1956 issue AMERICAN FORESTS brought forth an editorial entitled "Let's Fill Up the Forestry Schools." This article which frankly dealt with the difficulties of recruiting foresters in the United States came to the conclusion that right now and for some time to come the demand for foresters cannot be sufficiently met. The reverse situation of the forestry personnel in the Federal Republic of Germany might offer certain possibilities for a compensation.

When in 1945 Germany lost her Eastern territories which were largely covered with forests, many foresters were expelled or lost their jobs. So far only a limited number of them have been put to work in their proper profession. Moreover a great number of foresters came into the Federal Republic as refugees from the Soviet Zone. And finally, in addition to these jobless foresters there are all those persons who before, during and after the war started to study forestry and have finished their training in recent years, but did not find employment in forestry as all positions are filled.

So, young, highly qualified foresters with excellent training have to work in other professions. They are mostly underpaid. This situation will last for quite some years to come. Most of these people hate to undergo another training for a different profession.

In this state of affairs the deficiency of forestry personnel in the United States could perhaps be compensated partly by German foresters. Since generations, Germans have found a second Home-Country in the New World. Our professional organization to which most of the German foresters belong could imagine that also nowadays young and active people with sound professional training are willing to emigrate to the United States, start all over again, and fill existing vacancies.

Such measures would be considerably facilitated if a special quota for emigration of German foresters were granted and if German technical requirements were considered as a sufficient qualification for taking over jobs which are normally filled with graduates of American forestry schools. Your favorable consideration will be deeply appreciated. If necessary you might contact Mr. W. Koehler, our forestry secretary in the Embassy of the Federal Republic of Germany in Washington who is well informed of the forestry personnel in his country. Mr. Koehler will receive a copy of this letter.

Baron von Bistram, Forstmeister
Bund Deutscher Schriftmannen
Federal Republic of Germany

(Editor's Note—Hurdles that exist as regards such a proposition will have to be explored, of course. In this connection, AFA's Chief Forester and other technical leaders plan to confer with Mr. Koehler.)

Salute to Maryland

EDITOR:

I wish to thank you for sending me a copy of AMERICAN FORESTS which salutes our State in its October issue. I think it is a splendid issue and I am delighted to have a copy.

I greatly enjoyed addressing the American Forestry Association yesterday at La Plata, and in the hope that you might be interested, I am very happy to enclose a copy of the text of my remarks.

Theodore R. McKeldin
Governor of Maryland

Wilderness Bill

EDITOR:

I have read with considerable interest the item in AMERICAN FORESTS for August, 1956 regarding Senator Humphrey's National Wilderness Preservation System (S. 4013).

Although, as an individual, I am very much interested in wilderness areas because of the particularly beneficial effect they have on those of us who are harried by the hustle and bustle of urban living, I am definitely not in favor of tying up vast areas of the United States public lands system in wilderness areas. Having attended Forestry School in Idaho and spending some years working in that State, I am fully aware that we have sufficient inaccessible areas to provide us with all of the wilderness we can possibly use. Besides that, I have worked for the Forest Products Industry for many years and I have been unable to find any conflict between the orderly harvest of forest products and the use of the same areas by people interested in forests in their natural state.

Naturally, I believe that most of the people who would be in favor of such a bill as S.4013 are people who support such legislation through sentiment rather than through clear thinking. Most people fail to

G. Flippe Gravatt, ecologist in the Division of Pathology of the Department of Agriculture, Beltsville, Maryland, left for Miami, Florida, last month to explore the cause and to work for a possible cure of a disease that is threatening the coconut palm trees.

Dr. Gravatt, active in both the Nature Conservancy and The American Forestry Association, will be working for the City of Miami whose 35,000 palms are in the path of the disease that is believed to have originated in the Caribbean. To city officials, one danger is the fact that the disease causes the palms to drop their coconuts in batches thereby threatening individuals passing underneath.

realize that if a natural forest is not harvested by man, it will be harvested by natural forces, and the devastation resulting from natural forces can be and often is many times as severe as accepted industrial harvesting methods.

The use of true wilderness areas by domestic stock is as severely limited by accessibility as is the use by the forest products industry. I have personally traversed many of the inaccessible areas in the State of Idaho and, by far, the larger part of these areas is never seen by domestic stock because feed is so severely limited and the areas are so inaccessible.

I believe the Executive Committee of the American Forestry Association is taking a very healthy view of the wilderness problem and you certainly have my wholehearted support for whatever it is worth. Although I have not as yet been able to take advantage of one of the AFA Trail Riders Expeditions, our boys are looking forward to such an experience with a great deal of anticipation and I sincerely hope that we shall be able to go on one in the very near future.

I shall immediately notify my Senators and Congressmen regarding my feelings on S. 4013.

Ward Smith
805 Messer Street
Rhinelander, Wis.

EDITOR:

Although entering a controversy is awkward for a new member, I am disappointed in the Association's attitude toward the Wilderness Bill. . . .

Present administrative practices are not equal to preserving our wildernesses, as two local examples will show. Several years ago a Wild Area was designated on the slopes of the Sierra Blanca here. But the resort town of Ruidoso kept invading and growing, resulting in roads instead of trails, stables and night clubs instead of trees and pure mountain streams. The Forest Service is now in retreat, relocating the Wild Area on the opposite side of the mountains.

Here at White Sands National Monument—and this points up the further argument that many of the Wilderness Bill areas have nothing to do with forests—there is theoretical protection in a written agreement between the Secretaries of War and of Interior. Nevertheless, in the Lake Lucero portion the military has invaded with roads, power lines and installations, bad enough in themselves but leading to pillaging of the spectacular crystal beds and other depredation. In addition, the military has waged a general campaign of harassment, obviously hoping to take over the entire monument.

I am convinced that nothing short of Congressional action can halt the increased destruction of our wilderness areas. And once they are lost, I agree with those who maintain that we will have people walking

around who are spiritually and therefore mentally and physically sick, wondering what is wrong with themselves and the world.

Robert B. Koonce, Owner
White Sands Concession Company
Alamogordo, New Mexico

DEAR PROFESSOR CHAPMAN:

Your statement on the wilderness bill has been received. I am delighted to have your views because the policy questions involved are succinctly stated.

There seems to be no question in your mind that the wilderness concept is a sound one, although I sense that you feel that there have been administrative excesses in certain instances.

Therefore, it seems to me, that hearings and Congressional debate on the policy of how a wilderness area shall and shall not be used is in order.

Moreover you apparently would endorse having an Executive review made for each wilderness area to consider its size, its location in relation to other such areas, and its suitability as wilderness area.

Perhaps, as you suggest, my bill as presently drawn should not pass. I do not say that it should in its present form. I merely say that we should debate the issue and then decide.

If I may I would like to mention one point in your paper which may represent an oversight on your part. At the outset you say that the bill proposes "to cede to Congress final and permanent authority over the establishment and boundaries of wilderness areas. . . ."

I believe that all the powers that the Executive has in this field stem from legislation enacted by the Congress. In fact the authority for wilderness areas comes from an interpretation by the Executive that previous legislation on the national forests by the Congress granted broad authority for the creation of wilderness areas. Hence, I cannot agree that the Executive ever "cedes" power in this field to Congress. In fact, we in the Congress have long been accused of giving too much discretionary power to the Executive in this as in many other matters.

What I hope to do is develop a set of ground rules that provide for coordinate—check and balance—authority.

Again on page 4 you say, "But the greatest objection to a policy of empowering the Congress to dictate all matters . . . is . . . a deliberate substitution of political motives . . . in place of technical administration. . . ."

Congress already has the power. As a legislative body, it is not equipped to "dictate" on technical matters. Insofar as you purport to read the motives of the sponsors of this bill, this is assuredly not a "deliberate substitution" of political motives for technical administration. I can only beg of you that you reread the bill.

Look at the sponsors and you will find them to be among the greatest friends of sound technical forestry in the Senate.

Please be assured that I do appreciate your full and frank discussion of your views. I hope that you will keep in touch with me, and when hearings are held that you will testify.

Hubert H. Humphrey
U. S. Senator
Minnesota



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Industry's "Good Turn" For Boy Scouts



THE woods industries did a "good turn" for the Boy Scouts last year working through its educational arm, American Forest Products Industries, Inc., of Washington, D. C.

It all started when Ted Pettit, scout conservation director, called on AFPI and asked if it would like to do something constructive for the Boy Scout program. AFPI said that it would. Previously, AFPI had prepared and distributed 186,000 conservation kits for the nation's Cub Scouts. This program was so successful that Mr. Pettit suggested that a similar kit—one that would provide the working tools for a complete conservation program with emphasis on forestry—would fill a real need in the scout program.

Accordingly, both the scout officials and members of AFPI went to work digging up ideas. In addition to providing their own ideas, AFPI staff members directed by Charles A. Gillett called on the members of their national advisory committees. Soon busy executives were contributing suggestions on how to help the program along. Most of these people stressed the importance of forest fire prevention and tree planting programs. Other ideas included field trips to the woodlands, mills and lumber yards; collections of wood samples, leaves, insects and seed; pacing and use of the compass; how to measure trees; tree identification; timber estimating work; how to build bird houses; field trips to explain grazing damage to forests;

distribution of seed packets; tips on how to set up attractive forest displays; "how to do it" tips; how to make Biltmore sticks and how to conduct a Boy Scout loggers field day.

After numerous staff meetings and liaison with Boy Scouts leaders, all the assembled material began to shake down into a workable program as directed by James C. McClellan, AFPI Chief Forester, who also acted as chairman of the overall Boy Scout Kit Committee. To give the program continuity, it was agreed that the working kit should

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James C. McClellan, chief forester, American Forest Products, Inc., was chairman of Boy Scout Kit committee and directed the program

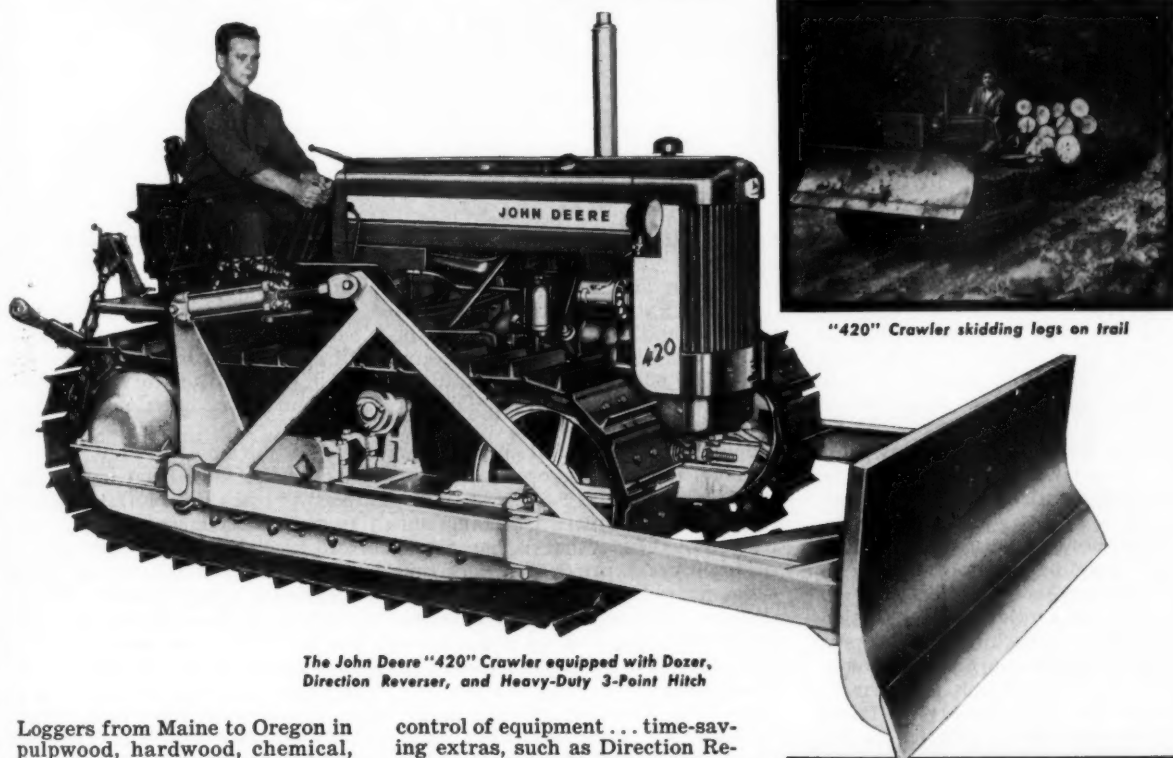
Photo by Bob Hurwitz

Boy Scout Forestry Kit Publicity

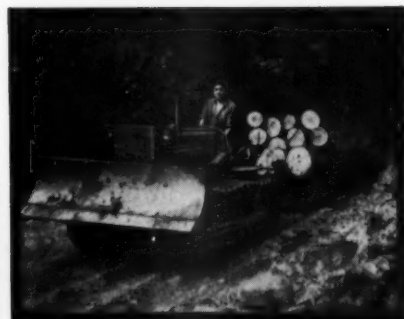


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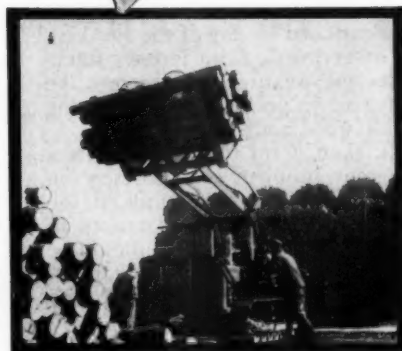
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Preston Takes Issue With Talks at LaPlata

By JOHN F. PRESTON

THE November issue of *American Forests* published the record of talks made at La Plata. I was unable to attend the meeting, but I have read the record with great interest. I am pleased to learn about the good work that is being done to promote good forest practices on small woodlands. I agree that we must get these small holdings properly managed if our nation is to be assured of an adequate future timber supply.

I am, however, disappointed that almost nothing was said by any of the speakers about matters close to my heart and on the subject of which I have been preaching for the past 10 years. Three-quarters of the owners of small woodlands are farmers and the fact that forestry on farms is an entirely different matter than it is on other small holdings, was scarcely mentioned by any of the speakers. In other words, farm forestry dominates the picture and becomes the outstanding problem in considering small woodlands.

If, then, farm forestry presents a different problem than forestry on non-farm private woodlands, it follows that primary consideration, in studying small woodlands, should be given to the ways of solving problems of farm forestry. Yet I find that all speakers treated farm forestry as if it were not something different, did not require separate and different treatment than ordinary forestry. Evidently the speakers at the AFA meeting think the same talk and demonstrations of forestry practice—silviculture, partial cutting, improvement cutting, selective cutting, thinning, etc.—will start farmers practicing good forestry, will have the same meaning to farmers as it does on non-farm timber owners.

The AFA speakers are satisfied to go on promoting forestry and developing wood markets on the premise

that these measures will persuade farmers to accept forestry as a farm practice and grow wood as a farm crop. Yet there is no hint of any effort, by education, demonstration, or any other means to get farmers and agricultural teachers to accept wood as an agricultural crop and to include the wood crop as a farm crop.

Of course, farmers are being impressed by the fact that in these times of high wood prices, foresters can show them how to get money for their woodland products. Farmers are delighted to pick up a few hundred or a few thousand dollars for some trees that they didn't know had any value. They are grateful to the foresters for their help but that doesn't mean that they will become future "forest farmers." Some of them may, of course, but past experience indicates that the great majority have learned merely that wood crops can be cut every once in awhile, possibly once in 5 or 10 or 20 years. Foresters know how to cut a woods properly so as to bring in the most dollars.

But is this what we should be teaching farmers? I contend that it is not. We should be teaching them that a farm woodland can be farmed and made to produce a wood crop on a basis similar to that of other farm crops, such as wheat, corn, fruit, and livestock. The elements of "wood as a farm crop" are:

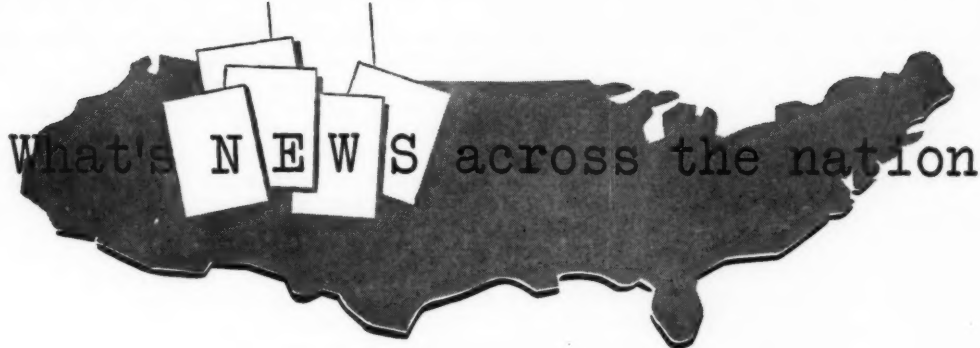
1. the farmer (not the forester) should be the forest manager;
2. products must be sold, not stumpage;
3. woods operations should be every year;
4. wood cutting must become a farm activity by farm labor (insofar as the size of woodland permits).

The farmer must embrace forestry, take it into the farm family, manage his wood crop himself; with the guidance of forestry technicians, of course; doesn't he have the guidance of agricultural technicians for other farm crops? But the farmer doesn't surrender the function of management, for crops other than wood, to the technicians.

Foresters have been trying for 50 years to teach farm forestry as forestry on farmland, seemingly failing to recognize that "farm" in "farm forestry" makes the latter an entirely different brand of forestry. Wood as a farm crop is something any farmer can handle all by himself. Those four elements do not require technical training but, of course, he will acquire that training if he keeps at the job of growing a farm crop in his woods. Foresters need the help of all agricultural teachers and workers to put such an idea over. Until farmers get that conception of farm forestry, there will be little success in promoting permanent forestry practices on farm woodlands. In other words, there is no foundation under the forestry effort so far as farmers are concerned. Foresters would not think of planting trees that had no roots, yet farm forestry without the farmers' acceptance of wood as a farm crop is something like that. It is pretty difficult to make a tree grow, with only the superstructure—that is, without roots. Some trees may sprout roots and grow in spite of none to begin with, but not many will survive.

The real question, of course, is—Am I, and those who agree with my premise, right about the ineffectiveness of our farm forestry education? Surely all those speakers at the AFA meeting couldn't be unaware that the brand of forestry teaching and demonstration presented at the meet-

(Turn to page 68)



What's NEWS across the nation

By JAMES B. CRAIG

TEMPO OF ACTIVITY PICKED UP IN THE AMERICAN FORESTRY ASSOCIATION in November and December as the association started activation of a project it has been urging for the last 25 years. That is the plan to take an objective look at the pattern of forest landownership in the nation as endorsed by 93.1 percent of members who approved AFA's Program for American Forestry in 1954. This membership vote followed a conference at Higgins Lake, Michigan, to draft a revised forestry program in the summer of 1953. A Fourth American Forest Congress to discuss and weigh the merits of this proposed draft was held later in the year. The Board of Directors next whipped the forest program into shape that was then submitted to the membership.

AS PREVIOUSLY STATED, THE PLAN TO EXAMINE THE OWNERSHIP PATTERN is not a new thing in American forestry. Writing in the Journal of Forestry (Volume 54, Number 3, March 1956) Dr. S. T. Dana commented, "A problem in which AFA has taken a long and continuing interest is that of forest landownership. While it has consistently supported the ownership of considerable areas by the federal and state governments, it has always regarded private ownership of the bulk of our forest areas as desirable. It has also recognized that changing conditions may call for changing patterns of ownership, and for the last 25 years has been urging thorough and impartial study of the situation."

THE 1947 PROGRAM FOR AMERICAN FORESTRY RECOMMENDED specifically "a state by state study of the desirable relationships between federal, state and private ownership, with a view to mutual understanding and agreement among all classes of forest owners as to further federal and state acquisitions."

IN 1953 THE DIRECTORS, AFTER ASSERTING THAT "THE ESSENTIAL INTEGRITY OF THE national forests must be preserved as part of our basic national policy," expressed belief "that the national forests would be strengthened by a realistic and impartial review of their boundaries, state by state, in the light of progress in forest management and other pertinent considerations including watershed protection, wildlife and recreational use. This review should provide factual information upon which to project the pattern of desirable national, state and private forest landownership in the foreseeable future. When approved by the Secretary of Agriculture, the state reviews should guide the future course of the department in respect to national forest additions or eliminations."

A YEAR LATER THE ASSOCIATION'S REVISED PROGRAM FOR AMERICAN FORESTRY recommended that:

- 1) Early action be taken by Congress to establish a joint Congressional Committee . . . whose objectives would be: a) to consider a desirable pattern for ownership of federal, state and private forest, range and other conservation lands; b) to formulate policies to guide action of public agencies toward achieving this pattern; c) to recommend to the Congress legislation needed to implement these policies.
- 2) Early action by the governor of each state to appoint a representative committee to report on the conditions in his state as they may relate to items a), b), and c) and render a report which will be made available to the joint Congressional Committee.

LANDOWNERSHIP IS A BIG SUBJECT. To get at it constructively, it soon became apparent that a series of two or three pattern studies were imperative if the various states were to conduct orderly reviews that would tie in effectively with the proposed Congressional review. Accordingly, AFA resolved it had a responsibility

(Turn to next page)

to see to it that such a pattern was established—a framework on which subsequent studies could be built. Accordingly, Dr. Dana in mid-November inaugurated a pilot study in California underwritten by the Nutrilite Foundation of that state. As described by Mr. DeWitt Nelson, chairman of AFA's Landownership Committee, this will not be a definitive study but rather a study to see how later studies can be effectively made. With Dr. Dana and his staff now at work full time, it is expected that the results of this framework effort will be reported out sometime next spring. AFA also hopes to make similar pilot studies in several other representative states. Whether an effort will be made to launch the Congressional phase of this study early in January or upon the completion of the California pilot study had not been fully decided in mid-December. Some favor immediate action on the Hill by AFA's forestry department. Others believe Congress could be given a more informed view of the overall situation by first submitting the results of the initial framework study. An early decision on this is expected.

CONSIDERABLE INTEREST HAS BEEN EVINCED IN THIS PIONEERING EFFORT since November, practically all of it favorable. As AFA is well aware, the public lands it proposes to examine objectively belong to the people and the private lands it also proposes to examine objectively belong to the various categories of private owners. These are the landlords and obviously, when any group supported by the public starts to take a critical look at other people's property, it behooves that group to first make sure these owners fully understand what it is trying to do.

JUDGING BY REACTION TO THE ACTUAL ACTIVATION OF THE PROJECT, AFA HAS DONE a pretty good job on this subject over a period of years. The great bulk of reaction on the part of members and others has been favorable. Some are skeptical, of course, which is also healthy. A few people have told us that we are "biting off more than we can chew." Others have said that "conditions are not now favorable for launching such a review." AFA interprets this to mean that individuals with this view have no confidence in the Administration. This view is not shared by AFA. While it has not approved everything the Administration has done in the resources field, it finds in general, that the national forests and the national parks are stronger today than they were four years ago. Apparently, this is a view also shared by a substantial number of American citizens.

A FEW OTHERS HAVE SUGGESTED THAT AFA IS "BEING INFLUENCED" by either the Forest Service, on the one hand or the "vested lumber interests" on the other. One particular group, while it didn't come right out flatly and say so in a signed statement, inferred that the Nutrilite Foundation was exerting some kind of influence on AFA. This is untrue. It is also untrue that any other group, public or private, is "influencing" AFA in any way. Today as in the past, The American Forestry Association will continue to paddle its own canoe.

AT THE SAME TIME, THESE CRITICISMS, BOTH FAVORABLE AND OTHERWISE, are valuable. They put us on our mettle. This is an immense project. Many people will be affected in one way or another. Therefore, we should not be thinskinny but should welcome all expressions of opinion. Accordingly, we thank these people who have advanced words of encouragement and we hope that by our good works we may soon convince the others that we are trying to do right. As always, it is AFA's policy to make friends, not enemies. Meanwhile, it is the staff's duty to push forward in achieving each of the goals set up for them by the members of AFA.

ONE OF THE VIGOROUS ADVOCATES OF THE OWNERSHIP STUDY was the late Col. W. B. Greeley. The Colonel, of course, was a man absolutely without fear and placed trust in the people to resolve their problems intelligently once acquainted with the facts. Several years ago the writer asked him, "Colonel, we do not believe we are cowards at AFA, but supposing this study, once it gets down into the states, gets out of balance? What do we do then?" The Colonel replied, "In the first place, it won't. The public, which is likely to become more public ownership minded as regards public lands rather than less so in future years, will see to that. But in the event it does, the association will have a strong, moral responsibility to kick whoever gets out of line squarely in the pants. Either way the association can't lose." That was one man's view.

IN HIS JOURNAL ARTICLE, "The American Forestry Association's First Eighty Years" already referred to, Dr. Dana commented, "The association (AFA) has been criticized at different times, and occasionally at the same time, as being under the control of some special interest such as the Forest Service or the forest industries. These opposing criticisms make it evident both that the association has pursued a middle course and that it has stuck to its convictions." AFA intends to continue that course.

Editorial

THE UGLY DUCKLING

Some weeks ago, Dr. William H. Kraemer, the well-known cancer research specialist, asked The American Forestry Association to send him a crate of ginkgo tree fruit. The possibility exists, his Elizabeth Storck Kraemer Memorial Foundation thought, that the fruit of this tree sometimes regarded as an ugly duckling by some due to its odor, may contain an alkaloid beneficial in retarding growth of cancerous tumors. Washington, D. C., of course, is well known for its ginkgo trees and has 6,000 of them. Accordingly, Chief Forester Kenneth B. Pomeroy relayed Dr. Kraemer's request along to John Batson, head of the District's trees division.

Mr. Batson was pleased by this request and promptly filled it. He is also tired of these people who continue to complain to him about ginkgo trees. While these trees are straight and well-formed with an exquisitely-shaped leaf, the fruit, once it is trod on and mashed, gives off a very offensive odor. As a result, Mr. Batson's department has not planted female ginkgo trees for some years now. Which is a shame, he thinks, because the ginkgo is an ideal tree in every other respect, especially on narrow city streets.

Aware that research people are a breed apart who dislike to have their operations bruited about in a premature manner, The American Forestry Association decided to keep Dr. Kraemer's request under its hat, at least for the time being. But the more Mr. Batson thought about his maligned ginkgo trees the more he thought people should know about their many virtues. All told, American trees today provide some 6,000 different products for human needs. Would it not be the best sort of Emersonian compensation, were this tree regarded by some as an ugly duckling to provide the wherewithal that would enable mankind to rid itself of its greatest scourge—cancer? That would certainly put the ginkgo at the very top of the tree kingdom in man's eyes.

Under the circumstances, it probably was not too surprising when this whole story erupted on the front page of a Washington newspaper one day last month, replete with pictures. Mr. Batson was liberally quoted. Dr. Kraemer, however, was not, in fact, his initial reaction when informed in Wilmington of this new development was to mutter "Oh Dear Me!"

As of this moment, the ginkgo fruit theory is just a theory, nothing more, Dr. Kraemer stressed. As a "tree lover" and a longtime member of AFA, Dr. Kraemer had noted that the fleshy substance of the plum-like ginkgo fruit, once mashed, had a disagreeable odor that also repelled insects. Practically all of the sulfas that have had some effect in retarding growth of cancerous cells have also had horrible odors. Possibly the "bugs" of cancer would be similarly repelled by the alkaloid elements of the ginkgo fruit.

"Actually, we have done so very little in curbing this disease," Dr. Kraemer said. "And as you must know, we are reaching out and trying EVERYTHING in this effort to cure it. For that reason you must not take this one piece of exploration—one of many, many others—too seriously. As you know, people have a way of getting their hopes up over any piece of news..."

Actually, this somewhat premature report of Dr.



The ginkgo tree, and the fruit of this "ugly duckling"

Kraemer's work seems to be taking a little different twist than he might have anticipated. The ginkgo may be controversial, but it has its champions as well as its detractors. In fact, an examination of AFA forestry records shows that more mail is received in regard to this particular tree than any other. For one thing, it is unique among trees. It is not closely related to any living family or group in the whole vegetable kingdom and is the sole survivor of a family, rich in species, which was distributed over the temperate regions of both the northern and southern hemispheres when the dinosaurs roamed the earth. It has been called a living fossil for it seems to be identical with fossil species, and presumably was a common tree in the present temperate and circumpolar regions of the whole northern hemisphere. Also, its fan-shaped leaf is found in no other flowering plant—and this has exerted appeal with many women.

Mail in reference to the ginkgo got a brisk boost last month as a result of the announcement of Dr. Kraemer's studies. While these correspondents wish the doctor well with his research, they are lauding him particularly as the nation's foremost protector of the ginkgo tree. "Who will now have the temerity to take an ax to a ginkgo?" one correspondent asked. Consideration of Dr. Kraemer for an AFA Distinguished Service Award was recommended by another correspondent.

All which prompts us to say, "Well done, Dr. Kraemer" for giving a great psychological boost to a much maligned tree. May your experiments in cancer research be equally fruitful.

"Scratch one tank!" And if they miss, chalk up a few trees to the credit of the 106mm recoilless rifle crew. Actually, trees in the background of a firing range are a loss anyway



FOREST

TRYING to raise a forest crop under an umbrella of artillery trajectories is not a customary procedure. Neither is keeping a daily check on forest and brush fires set by incendiary bullets and drifting parachute flares, or steering a lost tank company away from seedling areas and back to maneuver areas.

Trying to combine good forestry with military operations on a 285 square mile military reservation is the job of forester Norman F. Force of the Infantry Center, Fort Benning, Georgia.

A measure of his success is the 130,000 acres of producing timberland valued at roughly twelve million dollars, with an inventory of 450 million board feet of timber and 90,000 cords of standing pulpwood. With an annual cut of 13 million board feet of lumber and 8000 cords of pulpwood, the net profit—to the American taxpayer—has averaged \$450,000 a year for a total of five million dollars since the program began.

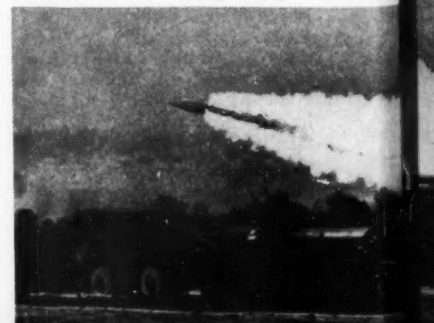
Mr. Force and his nine assistants have also produced a dividend to military training. In addition to making available poles and lumber for field fortifications and training construction, which would have cost the taxpayer a considerable amount if purchased on the open market; his forestry crew has put a stop to the plague of brush and forest fires which often denied troops access to training areas for days at a time until the fire burned itself out, or was brought under control by troops called away from necessary training to fight them. Preventive measures, such as firebreaks around artillery impact areas and controlled burning, have isolated primary fire sources and reduced the danger of their spread.

Unlike state forests, which can be closed when dry and do not have military incendiary hazards, the maneuver areas must be used for scheduled training regardless of condition. Consequently, two or three thousand acres a year receive fire damage with



Restricting tank maneuver areas helps keep down inevitable damage to trees

Separation of forestry and operations is difficult with long range artillery





This night training exercise shows flaming napalm, incendiary shells, grenades, fiery tracers and flares

Mr. Force jots down bearings of fire reported from fire tower as aide posts fire location on map



UNDER FIRE •

By CAPT. ROSS A. SHELDON
Hq The School Brigade, Ft. Benning, Ga.



Firebreaks and preventive controlled burning are sometimes not enough, and occasionally troops must be called to fight fires outside of range areas



Wires and nails left in trees will be found years later by lumbermen

Despite tanks in the timber, flares in the forest, and guns in the groves, forest practices at Fort Benning's Infantry Center are yielding substantial profits. On this military reservation where training comes first and forestry second, Forester Force refers to his branch as the "tail wagging behind the tank"



an annual loss totaling \$15,000.

Principal causes of fires are not live ammunition, but the aerial flares, blanks and "simulators" (firecrackers used to simulate shell explosions in training exercises). These scatter burning fragments in the brush and dry grass, and the resulting fire cannot be fought until the training exercise is over. If there is a high wind, the small fires may have merged into a sizeable conflagration by the time the fire fighters can get at it. Troops are rarely called out to fight them as the good forestry practices now used prevents serious fires from developing to the point where the forestry crew cannot handle them.

Comparing two maps of reservation, forest fires in 1950 (prior to the start of the program) and in 1954 (driest year in history) show better than words the results of good forestry. In 1950 the average (120) forest fires spread until natural barriers stopped them. In 1954 the more numerous (300) fires resulting from exceptional dryness did not get far. Firebreaks, controlled burning of maneuver areas, and fire-conscious military personnel kept the fires con-



Aerial view of the sawmill and concentration yard, which translates the acres of trees into board feet of lumber for military use. The net profit from forestry operations has averaged \$450,000 annually



A sergeant demonstrates the proper way to quickly drop a tree across a trail, making obstacle for tanks and vehicles

For demonstration purposes, Forester Force suggested tanks take same route through "battleground" to spare trees



fined to the impact areas (which are seldom entered due to the presence of duds). Units in training and military police range guards help spot and report fires, in addition to the watch kept by the eight fire towers scattered through the reservation and nearby state forests.

A recent example of combined military and forestry operation to the mutual benefit of both, was the construction of Weigel Range, a 180 acre piece of ground covered with loblolly and shortleaf pine and brush. When the army started figuring out what it would cost to clear the area for a maneuver ground for its Platoon Tactics training, the astronomical cost made the project seem unfeasible. Following a forest survey, civilian lumber contractors were contacted with the proposal that they harvest the timber and clear the area for training purposes as part of the contract. Result: The army had the area cleared for free, and received a fat check for 347,000 board feet of utility poles, a million board feet of saw timber and 1253 cords of pulpwood to the tune of \$65,500.00!! This did not include

several thousand feet of metal-infested logs given to the army for pioneer construction in the training areas.

"This," commented Mr. Force, "is what we call mutual back-scratching. The taxpayer got a training ground for his soldiers and was paid for accepting it. The contractor got good timber at the market price from a

Sawmill and concentration yard, where trucks bring logs from nearby forest



source close by. Everyone benefited and nothing was wasted. That's good business management." The "pre-harvesting" of timber on ranges before use is now a standard practice.

Not that the close relationship of troop training and forestry operations always follow such a smooth path. "Force's Forces" have long given up the idea of planting trees. It's economically hazardous. Within a few years after planting, military requirements (such as the recent Korean incident) might require use of the planted area for training purposes. Or a new weapon and tactical development might require expanded maneuver ground.

"We concentrate on aiding natural reproduction" said Mr. Force. "We girdle the weed trees to give the pine seedlings room, and practice selective cutting. By good forestry you can let the trees reproduce themselves more cheaply than by planting."

Mr. Force received his BS in forestry from the University of Michigan in 1939, and had completed one-third of his work for a masters degree in Wildlife Management in the zoology department of Ohio State

when World War II broke out. After service with an Aviation Engineer Construction unit in the Mariannas, he returned to civilian life, spending four and a half years with the Southeastern Forest Experimental Station at Asheville North Carolina. In February, 1951, he became the first Department of the Army forester to be assigned to Fort Benning, when the previous system of joint Department of the Interior and Department of the Army management of reservation forests was dissolved in favor of unilateral control by the Department of the Army.

"We believe in training first, forestry second," said Mr. Force. "We are the tail wagging behind the tank."

His principal assistant, Mr. John C. Metcalf, received his BS in forestry from the University of Georgia, followed by a year of graduate work in Wildlife Management at Alabama Tech. He joined the post forestry branch in 1951 upon completing school.

Together with the other members of the forestry branch, they operate a service for Fort Benning and the

Times Have Changed

Apparently the infantry has come a long way since the days when Forester Burley Lufburrow, newly appointed forestry officer at Camp Stewart, Georgia, tried to stop a wild fire. Drip torch in hand, Burley was trying to burn out a control line ahead of the advancing fire when an MP stopped him.

"Sir, you will have to come to headquarters," the MP said firmly.

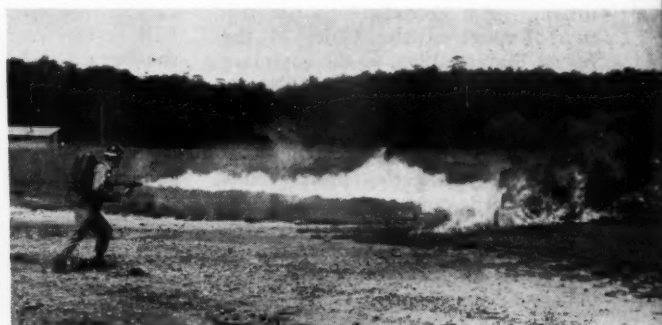
"Sorry, I can't do it," Burley replied just as firmly. "This backfire must be set." To which the MP replied, "Yes sir, sorry sir, but the Colonel ordered us to bring in anybody caught setting fire."

And that is exactly what the MP did—while the fire burned merrily on.

American taxpayer which, despite tanks in the timber, flares in the forest and guns in the grove, has resulted in not only a considerable saving but a substantial profit as well.



Forestry personnel rapidly dig a trench in the face of a fire and apply the torch to clear area in front of it



Well-cleared demonstration and training areas for flammable weapons are relatively easy to keep free of fires

Planting trees is economically hazardous, as the Army may need the planted areas for training purposes. The foresters concentrate on aiding natural reproduction





Forest Service Chief McARDLE

Chief of the Forest Service Reports to the Secretary of Agriculture



Secretary of Agriculture BENSON

THE enactment of Public Law 167, amending the general mining law, was the most significant Congressional action applicable to Forest Service activities during 1955, according to the Annual Report of the Chief of the Forest Service, 1955, to the Secretary of Agriculture. The report also recalled that when President Eisenhower signed the bill he called it one of the most important conservation measures affecting public lands that had been enacted in many years.

Public Law 167 is primarily concerned with above ground resources and goes a long way toward preventing abuses of the mining laws and interference between mining claims and the management of national forest resources. At the same time the legitimate miner retains all of his mining rights.

Immediately after Public Law 167 became effective, the report continued, work was begun on preparing instructions for administering all phases of the law, field work plans were organized, and in-service training conducted.

In summarizing other activities of the Forest Service and its plans for the future, Chief Forester Richard E. McARDLE said in his report that increasing the productivity of small woodlands, particularly, farm forests, and improving the condition of many national forest watersheds, are major problems confronting the Forest Service as it begins its second 50 years.

"The timber resource survey shows unquestionably," he continued, "that farmers—over 3 million of them—are the largest single group of forest landowners. Together with other small forest owners, they own over half of our forest land. Here lies the key to our nation's future timber supply as well as a largely untapped source of income to the farmer. The generally poor condition of farm forests indicates that cooperative partnership programs between the farmer, the state, and the federal government, need to be stepped up."

"Tree planting and range and watershed reseeding are far below needs," McARDLE declared. "Our increase in population," he continued, "places steadily growing pressures on the national forests. The needs for water timber, and forage, for recreation, for wilderness areas, and for hunting and fishing, mount constantly. This places our multiple-use principle of management under severe strain, and tests our skill in both resource management and human relations."

However, in this annual report for the Forest Service's Golden Anniversary year, Chief McARDLE was able to report significant progress in forest conservation. Designated as an outstanding accomplishment in this direction, was the completion of the preliminary report from the Timber Resource Review, the most complete "state-of-the-nation" appraisal of timber resources that has ever

been made. Results of this intensive study will enable the Forest Service to more accurately determine a program to help insure the country's future timber supply.

In its timber management program, the Forest Service reports that during 1955 five hundred and twenty-nine miles of additional access roads were constructed or reconstructed, making more national forest timber available to purchasers. Also in 1955, the national forests produced a record timber cut of 6.33 billion board-feet, about 15% of all lumber produced in this country. A total of 27,542 sales were prepared and administered by the Forest Service, with 21,618 of them for \$2,000 worth of timber or less.

Forest insects and diseases continue to be responsible for great damage to timber stands and related values, but some success in control is reported. The spruce bark beetle infestation in Montana is nearing control, as it is in Colorado. The southern pine beetles have become troublesome to a lesser extent, and the spruce budworm, which threatened timber stands in Idaho, Montana, New Mexico and Oregon was treated with aerial spraying.

Watershed management, an important part of the Forest Service's multiple use program, was reviewed in the report. In the West, where water from the national forests supplies domestic and industrial needs for about 1800 communities, ener-

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An address made before the
American Mining Congress

Progress Report on Public Law 167

By EDWARD P. CLIFF

*Assistant Chief, Forest Service
U. S. Department of Agriculture*

I FEEL more at home with miners than you might expect. As a youth I was better acquainted with a "muck stick" than the Biltmore stick we use in forestry. Although my career as a hard rock miner was brief, I have always valued the experience of working underground and the knowledge it gave me of mining methods and mining men. So it is of more than usual interest to me that in addition to the benefits of Public Law 167 to land management, it has also brought mining people and foresters closer together than ever before to my knowledge.

The President referred to Public Law 167 of the 84th Congress as one of the most important conservation measures affecting public lands that had been enacted in many years. We think so, too. The credit goes to the cooperative work of many people—the Congress of the United States, the American Mining Congress, The American Forestry Association, the Departments of Agriculture and Interior, and many other people interested in multiple use of our national forests and public lands. It has been a cooperative job from the start; and we plan on keeping it that way. It's a "double jack" proposition!

In preparing field instructions for administering this law, the Forest Service consulted frequently with representatives of the mining industry and the Department of the Interi-

or. Advance copies of our regulations and instructions, and the leaflet "What is the Multiple-Use Mining Law?", were furnished to the American Mining Congress staff and the Department of the Interior for review and comment. Their comments and suggestions were most helpful. I welcome this as another opportunity to compare notes with you, to thank you for your help, and to bring you up to date on the progress in administration of Public Law 167 on the national forests.

There is a lot of work to do when an act as far reaching and complex as the Act of July 23, 1955, becomes law. As we saw the job in July of last year, it was divided into three major parts.

First, there was a public relations job—as much with our own people as those who are mining or making other use of national forest resources. It seemed essential to us that we should start off on the right foot in administering this law on the national forests with a complete understanding of just what the provisions of the law required—what they required of the miner and what they required of the government agencies. We felt that it was also essential that our field men guard against over-zealousness or action which would create a misunderstanding that might set back the good intent of the law many years. So this was our first job—to insure that our own field people and the affected public fully understood the provisions of the new law.

Secondly, we had the job of translating the law into regulations, policies, and procedures for field administration; prescribing the proper delegation of authority to field officers from that vested in the Secretary of Agriculture; and obtaining sufficient funds to get the job underway.

Third, there was the job of hiring and training men who would translate these regulations, plans and procedures into action in the field. The examination of selected areas for determination of surface rights on mining claims filed on national forest land prior to July 23, 1955, had to be started immediately as it forms the basic foundation for future administration of the law. The disposal of mineral materials, as authorized by Section 1 of the act and the secretary's new Regulation U-13, 36 CFR 251.4, had to be fully understood by our field people and prospective applicants. The day-to-day administration by the Forest Service of surface rights on mining claims on the national forests required a new management approach and understanding particularly in the field of timber management. A new timber Regulation S-5, which prescribes procedures under the law had to be written. New guidelines to follow in building access roads across mining claims had to be developed. The provisions of the new law as it applies to the public's right to hunt and fish on mining claims, and the legal restrictions that might be properly imposed by the miner required close recognition by sportsmen, miners, and forest officers alike. These things added up to a new approach in managing of national forest lands where mining claims covered a large or important part of the area. So our first field action amounted to a large training job not only for qualified mineral examiners, who were not familiar with the national forest administration but our other field personnel. With the passage of this bill, all of these phases of the job had to go forward together.

As soon as it appeared that the bill would pass, the Department of

Agriculture requested an appropriation of \$300,000 to start the program of determination of surface rights on mining claims as specified by Section 5 of the act. Congress responded by appropriating that amount to administer the law the first year.

A forest supervisor who had had long experience with mining activities on national forests was transferred to the Washington office to head up the program. Each of the western regional offices and Alaska employed a staff officer and additional mining engineers and geologists to supervise the program, and provide technical advice at the regional level. By late August, 1955, we were underway with preliminary instructions and a supervisory organization to do the job.

We immediately started preparation of a leaflet called "What is the New Multiple Use Mining Law?" which was designed to present a lay interpretation of the law and how it would affect mining and other national forest resource use. The leaflet has been widely distributed and in many instances formed the basis for local newspaper articles throughout mining areas of the West. The pamphlet is still available at all Forest Service offices in mining areas. News items were also prepared to be released in local newspapers prior to any field examinations. Our regional offices and national forests prepared their own material to fit local conditions. We feel sure that this spade work in preparing a public understanding has done much to establish the good relationships that appear to exist. At least we have had no complaints in Washington which, I might add, is not the usual situation.

Early in October, 1955, a meeting was held in Denver for Forest Service

DETERMINATION OF SURFACE RIGHTS • NATIONAL FOREST LANDS ACT OF JULY 23, 1955

The process by which a determination of surface rights on mining claims is made on national forest lands under Sec. 5 of the act of July 23, 1955 (69 Stat. 367) consists of five principal steps.

1. Field examination of the area and examination of certain county records by the Forest Service, and preparation of affidavits based thereon for submission with request for publication of notice.
2. Publication of Public Notice by the Bureau of Land Management for nine consecutive weeks in a newspaper of general circulation in the county in which the area is located.
3. One hundred and fifty day period, after date of first publication, during which claimants may file verified statements asserting surface rights with the Bureau of Land Management.
4. Examination of claims for which verified statements were filed, by Forest Service mineral examiners for use in determining the validity of asserted surface rights.
5. Hearings conducted by the Bureau of Land Management on claims for which verified statements were filed, and decisions by Bureau of Land Management as to validity of asserted rights.

people assigned to supervise this program and members of the General Counsel's office of the Department of Agriculture, who have been active members of the team in developing the regulations, policies and guidelines. Representatives of the Bureau of Land Management, Department of the Interior also attended the Denver meeting. This meeting was primarily a training session to set the pattern for uniform action and instructions for administration of the law.

Following this meeting the regions held training sessions for their field personnel and the men on the ground who were to make the field examinations of the areas to determine what claims were occupied and who occupied them. By and large these crews were made up of rangers and men who had local knowledge of the country and the people who were working and living

were considered of high priority for early examination because of complicated land use management problems. In some areas old abandoned, dormant, or inactive claims existed along with active claims. Field work on all of these areas has been completed and the 150 day publication of notice was begun in March and April of this year.

In the field examination work under Sec. 5 of the new law, each member of the crew is assigned a specific area to be examined. Before he goes into the field, topographic maps and aerial photographs are studied and used in making a plan for detailed examination. All reasonably available data and information on current mining activity in the area are assembled so that by the time the crews are ready to start a field examination they have a fairly good idea of the job, where to go and what they might find. The first job

activity in the area. He explains what he is doing and why he is doing it. So far most local residents and prospectors have been helpful to field crews. This cooperative attitude of the miners is reflected in the large number of waivers that have been given to the government under the provisions of Sec. 6 of the new law.

As the search progresses, field notes are jotted down at each finding of new evidence or information that establishes the occupancy or recent working of a claim. These notes form the basis of the examination report.

Following the ground search the field examiner prepares an affidavit of what he did and saw on this selected area. These affidavits are reviewed by the General Counsel's office for legal sufficiency. For the first eight areas completed by July 1, 1956, there were 90 such affidavits. Evidence of recent work was found on some 260 claims; but the field crews were unable to find the names and addresses of the claimants to about 80 of these claims. Six persons were actually found working their claims in a total area of some 575,000 acres examined. Information from the county records indicated that there were over 7,000 claims filed on these areas. In other words, our crews found that the claimant was in actual possession or working his claim on about three out of each 100 claims.

The tract indexes of each county, where a determination of surface rights procedure is being processed, are then searched for any record affecting the land being examined. Upon completion of the field examination, a request is made to the Department of the Interior for publication of notice to mining claimants, for determination of surface rights. This request contains a description of lands to be covered, affidavits of examination and a certificate of examination of the tract indexes. Within 15 days after the date of the first publication of notice a copy of the notice is mailed, by registered mail, to each person found in possession or working a claim to those recorded in the tract indexes of the county records, and to those who have filed a request for such notice in compliance with Sec. 5 (d) of the act.

The first area for which the 150 day publication period was completed is a 7,000 acre area containing about 115 claims in the Bitterroot National Forest in Montana. Not a single person asserted rights by

DETERMINATION OF SURFACE RIGHTS NATIONAL FOREST LANDS ACT OF JULY 23, 1955

TABLE I (As of 12/1/56)

Total number of areas completed or being processed under Sec. 5 of the act of July 23, 1955.

State	Number of Areas	Acreage	Estimated number of claims on the areas filed prior to 7/23/55
Arizona	12	1,920,141	8,900
California	40	2,606,480	18,075
Colorado	10	912,061	71,100
Idaho	50	10,201,417	37,213
Montana	11	719,789	2,870
Nevada	---	---	---
New Mexico	14	2,458,417	11,595
Oregon	21	1,103,155	7,696
South Dakota	4	474,842	46,000
Utah	17	2,903,346	13,828
Washington	20	1,311,321	6,815
Wyoming	3	546,210	90
Alaska	5	834,940	600
TOTAL	207	25,992,119	224,782

in the areas to be examined. Fifteen mining engineers and a geologist were hired and trained in claim examination work by our experienced mineral examiners. The General Counsel's office trained the men in the preparation of affidavits. Field examination work was held up during the winter months of January and February, but the time was used to good advantage in more intensive training of field personnel on all phases of the new law.

Eight areas in the six western regions were selected in the initial plan for examination and determination of surface rights. These areas

is to explore all trails or roads which may give a clue to mining activity. All posted notices, timber cuttings, blazes, or other signs of recent work are mapped and noted. On finding an indication of occupancy or mining, an effort is made to find the actual workings; and old workings are investigated for evidence of recent activity. New timber sets, new muck on a dump, newly used tools or equipment, and recent timber cuttings for mine props or lagging are noted. All cabins are checked for occupancy and ownership. The examiner usually visits with local residents and discusses recent mining



Author Edward P. Cliff, Forest Service

DETERMINATION OF SURFACE RIGHTS NATIONAL FOREST LANDS ACT OF JULY 23, 1955

TABLE II (As of 12/1/56)

Areas on which field examinations have been completed by the Forest Service and public notices are being published by the Department of the Interior.

State	Number of Areas	Number of Acres	Estimated number of claims filed prior to 7/23/55	Number of claims on which evidence of actual possession or working was found by Forest Service Crews
Arizona	10	349,300	2,590	1,214
California	1	67,000	10,000	102
Colorado	5	652,789	5,335	164
Idaho	3	209,070	---	123
Montana	2	344,356	4,000	38
Nevada	9	368,380	2,596	248
New Mexico	1	---	5,000	41
Oregon	3	---	900	46
South Dakota	1	---	---	---
Utah	3	---	---	---
Washington	3	---	---	---
Wyoming	3	382,940	60	18
Alaska	37	2,838,865	31,451	1,994
TOTAL				

filing a verified statement in this area. The 150 day publication period has since been completed in three additional areas and approximately 20 verified statements have been filed covering 133 claims. Each claim for which a verified statement has been filed must be examined by a qualified mineral examiner.

If the results of the examination are such that the Forest Service believes the claim is valid, then there

are no grounds for contesting the asserting rights; and the Forest Service will inform the Bureau of Land Management to that effect and no hearing will be necessary. On the other hand, if the results of the examination of a mining claim by a qualified mineral examiner are such that the Forest Service believes the asserted rights are invalid, a hearing will be held before the Bureau of Land Management hearing officer.

The BLM will make the final determination of the validity of the asserted rights. So far there have been no such hearings.

Considerable progress already has been made in field examinations to determine surface rights. In addition to the eight areas mentioned above, 3,000,000 acres on 37 areas containing an estimated 50,000 claims will have been examined by the time weather closes the work this fall. Additional areas have been selected for next year and we will again concentrate our efforts where a determination of surface rights will actually result in improved multiple use management.

The disposal of mineral materials under Sec. 1 of the Act of July 23, 1955, created a new job for our forest supervisors and district rangers. The Secretary of Agriculture issued Regulation U-13 (36 CFR 251.4) to implement Sec. 1 of the act twelve days after passage of the law, and authorized the Forest Service to dispose of the common varieties of sand, stone, gravel, pumice, pumice, and cinders on lands administered by this agency. Mineral materials having an appraised value of \$1,000 or more must be advertised for sale and sold to the highest bidder at not less than the appraised value. Where the appraised value is less than \$1,000 they may be sold at appraised value without advertisement or bid. Disposal of such materials may be made to public agencies without charge.

DETERMINATION OF SURFACE RIGHTS NATIONAL FOREST LANDS ACT OF JULY 23, 1955

TABLE III (As of 12/1/56)

Areas for which the publication notice has been completed.

State	Number of Areas	Number of Acres	Estimated No. of claims filed prior to 7/23/55	No. of claims on which evidence of actual possession or working was found by Forest Service Crews	No. of claims for which verified statements were filed
Arizona	---	---	---	---	---
California	1	30,320	2,000	41	30
Colorado	2	226,000	1,388	88	90
Idaho	1	7,040	115	0	0
Montana	---	---	---	---	---
Nevada	---	---	---	---	---
New Mexico	---	---	---	---	---
Oregon	---	---	---	---	---
South Dakota	---	---	---	---	---
Utah	1	128,320	1,000	19	184
Washington	1	22,700	700	31	104
Wyoming	---	---	---	---	---
Alaska	---	---	---	---	---
TOTAL	6	414,308	5,208	179	408

The practicability of the policies and procedures for the disposal of these materials is being tested by field application. After a reasonable period, the policies and field instructions will be reviewed and revised before being placed in the Forest Service Manual. This is a completely new field wherein "common varieties" of the named materials are removed from the operation of one law for disposal only under another. In some cases determination will have to be made as to whether a material is a "common variety" subject to disposal under the Materials Act as amended by the Act of July 23, 1955, or an uncommon variety subject to location and entry under the Mining Laws.

The act requires that before the Forest Service can dispose of any mineral materials on national forest lands withdrawn for other purposes, the consent of the other agencies involved must be obtained. To date we have working agreements with the Corps of Engineers which has jurisdiction on certain flood control projects, the Federal Power Commission, and the Bureau of Reclamation. Each one is a little different. With the Corps of Engineers, the forest supervisor and district engineer make up a master plan of the area. The Corps of Engineers then designates certain sites on which the materials can be disposed of by the Forest Service without further reference to the Corps. The Federal Power Commission has issued blanket authority for the Forest Service to permit disposal of mineral materials on Power Site Withdrawals, except where a licensed project is being constructed or operated, or where a project is under examination and survey by a Federal Power Commission licensee. The Bureau of Reclamation requires that the issuing officer clear with the regional director of the Bureau on all permits issued on Reclamation withdrawals. We are exploring with Reclamation the possibility of a blanket authorization for the issuance of mineral material permits for personal use and small commercial sales.

The largest permit issued to date is for the removal of 400,000 yards of rock at 5 cents a yard from 19 acres in Sanders County, Montana. This rock is to be used as ballast in the relocation of a railroad on the Noxon Rapids Dam Project. An additional permit for the removal of clay for this same power project is pending.

I believe all mining people are

aware that the Act of August 11, 1955, restored power withdrawals to new mineral entry under the Mining Laws. This, of course, has no bearing on the disposal of mineral materials.

The Act of July 23, 1955, has not been on the books long enough for us to fully evaluate the sort of day-to-day jobs and problems that will develop out of the provisions of the law dealing with the general management and protection of the national forest surface resources. We want to harvest the timber in a normal manner as part of the Timber Management Plan and not speed up or direct cutting to get there first. The same philosophy must also apply to the use of other resources such as hunting or fishing by the public, stock grazing, and the building of roads. I can visualize some disagreements in what constitutes "interference" to mining operations where hunting, stock grazing or road construction are concerned. But I believe these disagreements will mostly be confined to personalities rather than judgment or misunderstanding of the meaning and intent of the law. These disagreements must be settled largely on the ground between the ranger and the miner. I imagine it is going to require a little give and take on the part of both and a good understanding of each other's responsibilities and rights under the law to avoid local squabbles.

An assay of where we are in the administration of the Act of July 23, 1955, will show that the general public, the miners and Forest Service people appear to have a good working knowledge of the law. To my knowledge our relationships with the miners on the ground are as good as those we enjoy with the American Mining Congress.

We have organized and trained our field people to do the planned job of field examination and determination of surface rights in the time proposed.

Fitting the new law into the complex of existing laws, regulations and policies governing the management of national forest lands has been accomplished.

No doubt, we will lose the vein for a time on some levels and have it pinch out on us and others, as the law becomes more widely applied. But we believe this is a real strike, and we don't think there will be any major problems if we just continue the team work approach that is so well on its way.

John Philip Weyerhaeuser

THE man who made "tree farm" a household word, John Philip Weyerhaeuser president of the Weyerhaeuser Timber Company, died of leukemia at the age of 57 on December 8, in Tacoma, Washington.

Under his direction, the Weyerhaeuser Company's holdings were welded into a modern industry of large proportions based on the tree farm concept, which this company originated in 1940.

Mr. Weyerhaeuser exerted a profound influence on the world of renewable natural resources. An AFA Distinguished Service Award winner, his citation read in part, "By encouraging and supporting long-range industrial forestry programs and in generously sharing his research findings, Mr. Weyerhaeuser has contributed immeasurably to the development of private forestry in the Northwest and throughout the nation."

In 1921, Mr. Weyerhaeuser began his career in the lumber industry with the Edward Rutledge Timber Company of Coeur d'Alene, Idaho, and in 1922 was named sales manager of that company. He became general manager of Clearwater Timber Company in 1925, a position that he held until 1931 when he was made president of Potlatch Forests, Inc., Lewiston, Idaho. His appointment as executive vice-president of the Weyerhaeuser Timber Company occurred in 1933, followed by advancement to president in 1947.

Mr. Weyerhaeuser's extracurricular activities were numerous. He served as a director of Boeing Airplane Company; director, Stanford Research Institute; trustee, Foundation for Economic Education, Inc.; former president, Washington State Historical Society; and in October was elected president of American Forest Products Industries, Inc. He also served as a delegate to the Timber Committee of the Food and Agriculture Organization of the United Nations held in Geneva in 1955.

Uproar on Klamath

By ANTHONY NETBOY

CITIZENS of the Klamath Basin in eastern Oregon, and especially businessmen, are in an uproar about the possible consequences of the new federal Indian policy as it affects the Klamath Reservation. In 1954 Congress enacted Public Law 587 calling for termination of federal control over the Klamaths, living on an 850,000-acre, timber-rich reservation set up in 1864 when the Indians ceded to the United States 13,700,000 acres in southern Oregon and northern California.

The reservation contains one of the few remaining large tracts of ponderosa pine in the United States. It supports about 3.9 billion board feet of commercial timber, growing on some 590,000 acres. Of this total, about 1.1 billion board feet is virgin timber standing on 90,000 acres and 2.8 billion is reserve growing stock on 500,000 acres of cutover forest. In addition to this tribally-owned timber, there are 225 million board feet of merchantable timber on individual Indian allotments.

The reservation also contains about 400 million board feet of lodgepole pine, scattered throughout 154,000 acres, for which a pulp market is now appearing.

Management by the Bureau of Indian Affairs during the past 40-odd years has enhanced the Klamath forest's commercial value. Under present practices this forest is expected to have an allowable cut of at least 81 million board feet of sawlogs annually for the next eight years, and a sustained yield cut of about 63 million board feet thereafter in perpetuity.

The Klamath forest is not only the core of the upper Klamath watershed but contains 26 percent of the total commercial forest area in the basin and 26 percent of the sawtimber volume in Klamath County. Lumber is the heart of the local economy. Its sawmills are now cutting about 300-350 million board feet annually, of which about a fourth comes from the reservation. Since lumber represents about 40 percent of the total value of products produced in the basin, reservation timber sustains at least 10 percent of the economy.

AMERICAN FORESTS



Reservation

II.

With this background of the reservation timber values, we may better understand the meaning and implications of Public Law 587.

Under the terms of the law, the Secretary of the Interior is directed to:

(1) have an appraisal made of all tribal property, showing its fair market value by practicable logging or other appropriate economic units;

(2) give each adult member of the tribe an opportunity to withdraw from the tribe and have his interest in tribal property converted into money and paid to him, or to remain in the tribe and participate in a management plan;

(3) determine . . . the portion of the tribal property which, if sold at the appraised value, would provide sufficient funds to pay the members who elect to have their interest converted into money, arrange for the sale of such property, and distribute the proceeds . . . ; and

(4) cause a plan to be prepared . . . satisfactory to the tribe and to the secretary for the management of tribal property through a trustee, corporation, or other legal entity.

All these actions must be accomplished before August 13, 1958, — about 20 months hence.

Former Secretary of the Interior McKay appointed Messrs. Watters, Phillips and Favell, Klamath Falls management specialists, to appraise the value of the tribal property and draw up a management plan in line with the wishes of the tribal members. The appraisal is expected to be completed by February, 1957.

In preparation for termination of supervision of the reservation the Bureau of Indian Affairs, in cooperation with the management specialists, is endeavoring to formulate policies that will not only meet with the requirements of the law and the desires of the Indians, but be most beneficial to the entire Klamath Basin. At once, an unavoidable dilemma confronts them.

Based on the findings of a survey made by the Stanford Research Institute, about 70 percent of the Klamath Indians will probably elect to withdraw from the tribe, take their share of the common assets, and

sever all economic ties with the government. If this were to happen, the Secretary of the Interior would have to sell as much as 2.7 billion board feet of tribally-owned timber before August 13, 1958. At the same time, restrictions on the sale of timber from the allotments would be lifted—making another 225 million feet available for purchase. Almost 3 billion feet of ponderosa pine would thus be thrown on the market, to be sold within a period of about one year, if termination is to be accomplished by the deadline set by Congress.

III.

The dumping of so much stumpage in a rush sale, in an area with an installed sawmill capacity of 300-350 million feet per year, would have serious consequences. It would upset the price structure. All timberland owners in the region would be affected and the ramifications would hit the entire western pine market.

Moreover, the government would be hard put as to the manner of selling the Indian timber. If the stumpage were offered for sale in large blocks, the price obtained would be less than if it were sold in small units. Yet the law says that the secretary, in handling the liquidation, must get a fair market value. How to solve this dilemma is a matter with which the management specialists are struggling.

Conservationists are alarmed because any large-scale sale of the timber in small units would most likely jeopardize sustained yield operations. Earle R. Wilcox, a forester well acquainted with the reservation, points out that, "although an operator could purchase a large number of small economic timber units on which to operate, it would still not be practicable for him to sustain his cutting over a long period of time unless he was able to obtain the timber at discounted or wholesale prices." In short, if liquidation of the forest is pursued on a small-block basis—the only way to get maximum returns for the Indians, as the SRI survey shows—the lands would be subjected doubtless to cut-out and get-out forestry.

If the bulk of the timber were sold to pay the withdrawing members of

the tribe, the remaining stands, which would belong in common to the Klamaths who remained on the reservation, could not be operated as a perpetually producing forest. The decreased allowable cut would bring much less than the \$3,000 per year, roughly, which every Indian family is now deriving from tribal property. Most likely, the remaining members, freed from government control, would sell as much stumpage as the market could absorb, without any thought of perpetual yield.

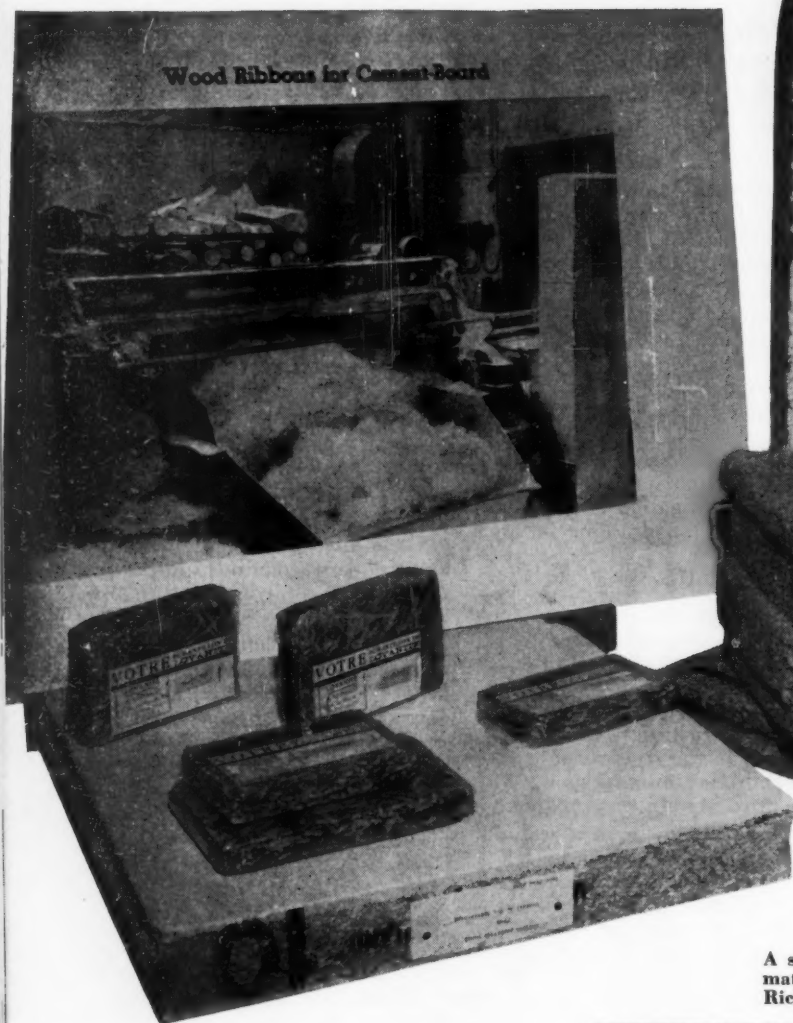
Oregon has a law designed to protect the forest from too rapid cutting. But Wilcox points out that this law requires only that a few small seed trees per acre be left in cutting ponderosa pine. Were the Indian lands, he says, "to be cut again, during the next few years, without further restrictions over the cutting than those imposed under present state forest laws, the predicted growth per acre for the reserve ponderosa pine would drop to approximately 25 board feet per year." This compares with 110 board feet per acre possible under sustained yield management.

The effects of the termination act, if carried out without amendments, would thus clearly be detrimental to the forest and to the economy of the Klamath Basin. "Our present thinking is," says T. B. Watters, one of the management specialists, "that if this bill is carried out as written and strictly followed, one of the finest stands of timber in the United States will be destroyed."

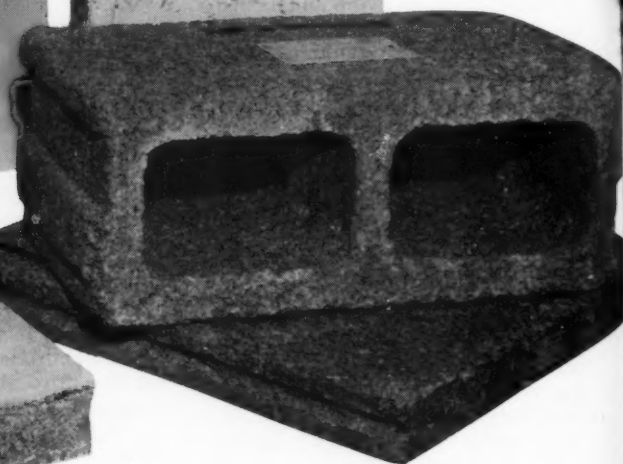
"Even if all the Indians stayed in the tribe," he adds, "and formed a corporation to manage the timber, the reservation still wouldn't be a good investment. It's not economically sound. The payments would drop to \$600 a year per person (compared with \$800 at present) in the 1960's when we're cutting second-growth stands. After taxes of \$200,000 a year and overhead, plus fire hazards, the Indians' return on the \$80 million investment will be less than 2 percent." The solution envisioned by him is that the federal government buy the reservation from the tribe, possibly with United States bonds, to assure continued operation

(Turn to page 61)

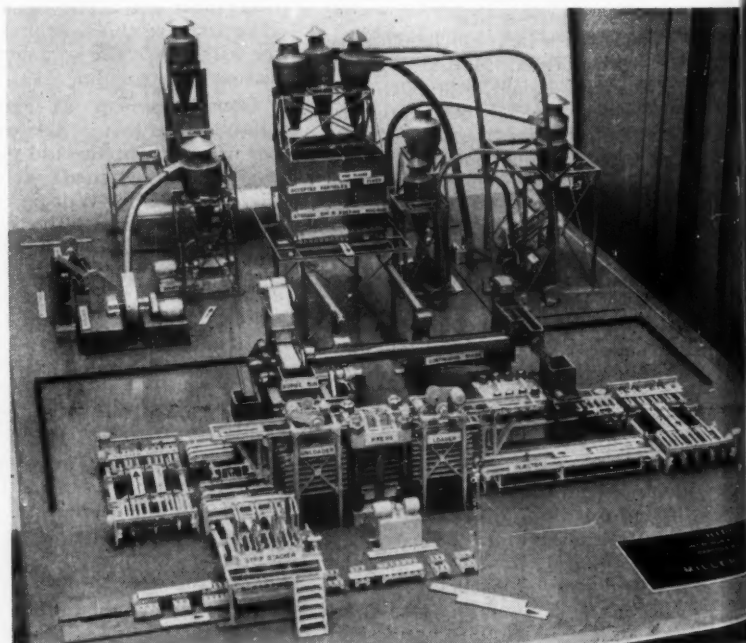
Wood Ribbons for Cement Board



Durisol, a product combining excelsior and cement, is used extensively throughout Europe for buildings of many types

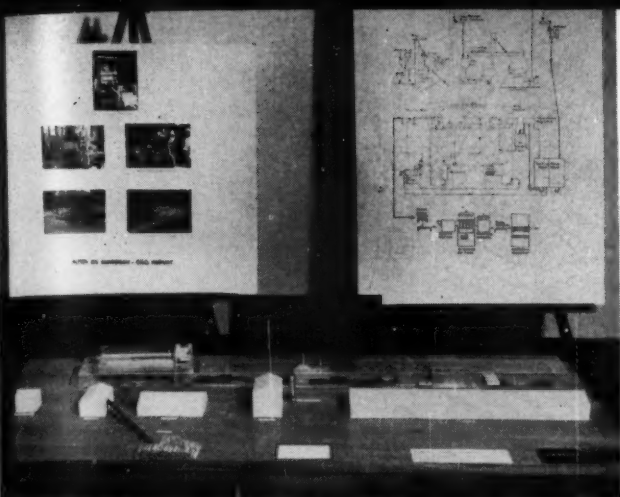


A scale model of the continuous and completely automatic particle board process, Miller Hofft, Inc., of Richmond, Virginia, was exhibited at the conference

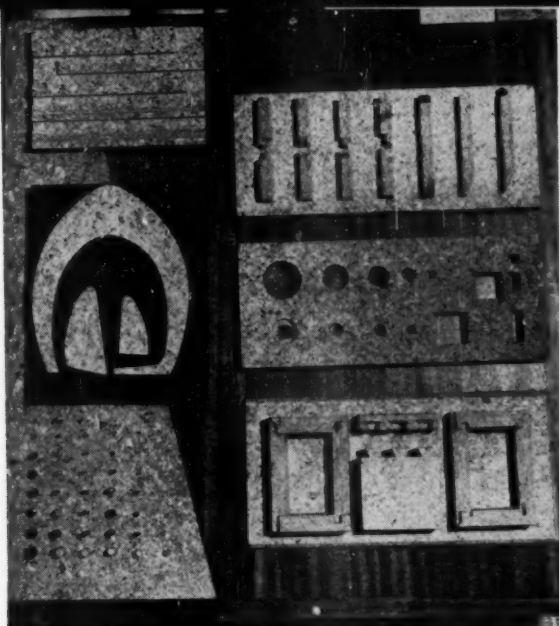


NEW TECHNIQUES IN WOOD UTILIZATION

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Swedish exhibit showed a model of a modern hardboard plant, having a daily capacity of 60 tons, using an Asplund as defibrator



Bartrev, Ltd., England, produces a variety of chipboards, in many respects superior to the natural product, for the building and furniture industries



The Chipcraft Company of Morristown, Tennessee, displayed many molded products made from wood waste, including paper roll plugs, furniture parts and brush backs, produced by its new molding unit



Coffee table manufactured by The Lane Company is indicative of the extensive use of particle board as furniture core stock, replacing solid wood cores

EUROPEAN companies appeared to be leading the way in the utilization of wood residue at the Second International Particle Board Conference, sponsored by the Timber Engineering Company, research affiliate of the National Lumber Manufacturers Association.

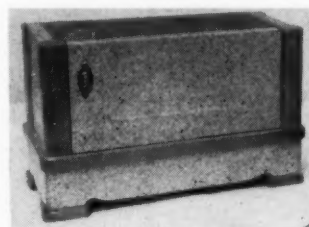
The two-day conference, held in Washington, D. C., last month, climaxed the second year of special surveys and studies of wood residue utilization techniques used in Europe and America, with emphasis on particle board, in a cooperative research project conducted by the TECO laboratory for a group of clients in the lumber, particle board, and wood-using industries.

A key attraction at the conference was an exhibit of the nation's largest collection of wood particle board

samples and other new products of modern utilization practices in the wood industries. With some 300 items from American and European manufacturers on display, revealing the multiplicity of uses for particle board, it was obvious that American manufacturers were trailing in the utilization field.

Among the more interesting European displays were samples of Pilgrim Board, a particle board from Sweden, Bartrev Board, a chipboard made in England, and Durisol, a material combining wood and cement, which was developed in Germany.

The exhibit was indicative of the world-wide interest in the new material that provides valid and profitable outlets for leftovers from forest thinnings, lumbering, and product manufacture.



Core stock for these chests was made by Fibrex flaking process



Increased tourist travel is compounding the recreational problems on national forests. With campgrounds full, where can they park?

By ALVA NEUNS

Summer Homes





Having to police the trailers takes time from maintenance work in campgrounds

on W H E E L S

LAST spring in Los Angeles, a man had a brand new idea. He bought a string of house trailers and as soon as the summer season opened in the Sierra Nevada mountains, he hauled them to the public campgrounds in Inyo National Forest, locked them and left them, and went back to the city. There he put ads in the newspapers.

Have a high mountain vacation with all the conveniences of home. Wonderful fishing, boating, hiking, and outdoor living. Fully equipped deluxe trailers for rent by the day, week, or month. Telephone now and reserve your vacation time . . .

The first day the man got 45 calls. One was from the headquarters of Inyo National Forest. "Sorry to ruin your business," said the supervisor, "but our campgrounds are for everyone and we can't allow a few people to tie-up most of the available spaces. You'd better come and haul your trailers away."

Every day during the summer season, forest rangers throughout California's national forests are asked the same question: "Where can we park our trailer? The campgrounds are full."

The answer isn't easy. California leads the nation in trailer owners. In southern California, many people prefer to live in trailer parks all year round and have formed clubs to promote more trailer living. Their enthusiasm plus the effect of advertising campaigns by trailer manufacturers, the sprawling growth of valley and coastal cities, and increasing tourist travel in trailers add up to a whopping mobile population that's beginning to alarm recreation leaders.

Another problem is the growing demand for a long-stay space in campgrounds in western national forests by a new army of migrating retired couples. For an average cost of

\$5,000 plus a modest \$75 license fee (in California), these people gain a permanent home and move about in trailers ranging from 45-foot monsters to compact units no larger than automobiles. Like birds, the retirees migrate with the weather, going South with the sun, from northern campgrounds to southern campgrounds, and back again. To beat the 15-day occupancy restrictions in some national forest campgrounds, long-stayers sometimes swap places with one another.

Other long-term trailer residents are construction workers on dam and roadbuilding projects and a new type of nomadic laborer who moves his family into a busy vacation area, parks them in a trailer—usually in a free national forest campground—and picks up odd jobs around the resorts.

Some trailer owners drive the family summer home on wheels up into the mountains, park it in a national forest campground, lock it,

leave it, and then commute back and forth from the city on week-ends, from May to October.

It's no wonder the people of California are restless. Few states can match the magnificent mountain ranges stretching more than 600 miles from 14,161-foot Mt. Shasta in the north to 14,495-foot Mt. Whitney in the south, near Death Valley. The Coast Range, the Cascades, and the Sierra Nevada cradle the 80-mile wide Sacramento and San Joaquin valleys. Together with the Douglas-fir and redwood-covered Siskiyou mountains in the northwest corner of the state, the mountains of California form a rough chain of 15 national forests and four national parks—a thousand-mile exploring ground for travelers.

The four national forests of southern California lie along the mountains behind Santa Barbara, Los Angeles, San Bernardino, and San Diego. The recreation in these forests runs from the all-year sun resorts

Grant Bay campground, San Bernardino National Forest, is shown cluttered with trailers. More and more people prefer to tour by trailer than to own permanent summer cottages—no fences to paint, no grass to cut, etc.



The campgrounds were developed for rustic, more primitive camping, cannot adequately accommodate trailers



The Forest Service has developed and maintained 900 campgrounds in the 20 million acres of California's national forests. Most of them are easily accessible.



at Palm Springs to skiing in the San Jacinto mountains; from hiking on Mt. Baldy to condor watching in Los Padres. Leisure-timers crowd Lake Arrowhead and Big Bear from January to December, and some of the wildest, steepest, and most primitive mountain country in the United States is less than two hours' drive from downtown Santa Barbara. Of the ten most heavily-used national forests in the United States, recreation-wise, California has four, Angeles National Forest being first.

With so many places to see, Californians have found it hard to settle for one. So they don't! With their houses on wheels they roam the West. More and more families prefer touring to owning a permanent summer cottage. There are no fences to paint, no grass to cut, no garbage to haul, and often no taxes to pay. The eating and sleeping arrangements simply go with the family.

U. S. super-highways fan out of the cities toward the mountains. The big freeways join well-engineered state highways that branch out to paved county roads which in turn, as you travel upward, connect with an intricate capillary system of back country forest roads that wind along rivers and creeks and sometimes climb to tiny glacial lakes stocked with trout. Some of the back roads are oiled, some are dusty, some are

rutted and bumpy, but all lead to the free national forest campgrounds. And just about all of the Forest Service campgrounds accommodate average-sized trailers.

But in the years since World War II, changes have taken place in the character of both trailers and the people who haul them.

Gone are the small simply-constructed "rolling camp" trailers. Many of these were little more than traveling tents and at most boasted a double bed, gasoline stove, ice box, water tank, and food storage. Now everyone seems to feel that he—or more often she—must have all the comforts of home. These include a flush toilet and shower as well as a

kitchen sink. "Ninety per cent of the trailers now being built, regardless of size, are equipped with full bathroom facilities," says a recent book on trailers. "A trailer isn't modern without a toilet."

Forest Service campgrounds, developed for rustic, more primitive camping, have neither facilities nor service for the waste disposal problems of modern trailers. In the 20 million acres of California's national forests, there are 900 developed and maintained campgrounds. Inyo National Forest, most heavily used by trailers of any forest in the U. S. just eight driving hours from Los Angeles and the heavily-populated urban centers of southern California, has 59 campsites. Fifty three are described as having "level space for trailers."

On one busy week-end in August, 1955, 50,000 people poured into Inyo National Forest. They hiked, climbed rocks, fished, picnicked, rowed boats, swam, loafed, watched birds, photographed wildflowers, and thousands, of course, camped one way or another. Hundreds and hundreds of trailers competed for the 500 trailer spaces. June, Silver, and Gull lake campgrounds swarmed with aluminum activity as 40-foot trailers blocked the turn-arounds while their frantic owners searched for parking places. "I never saw such confusion," said one old-timer. "There were more trailers than trees." The zealous trailer owners shoehorned their portable palaces into any level space. Three commercial trailer parks nearby that charged \$1.00 a night—electricity extra—were not only sold out, but the owners had to turn down three and four times the fee for space.

Only at nearby Shady Rest Public Campground in Ranger Barney Sweatt's district at Mammoth Lake

(Turn to page 64)

A controlled campground is Shady Rest on the Inyo National Forest, where trailer spaces are paved and laid out for individual comfort



Reading About Conservation...

Prairie Ducks by Lyle K. Sowls (The Stackpole Company, Harrisburg, Pennsylvania, pp. 193, \$4.75) is a study of the behavior, ecology, and management of these ducks by one of the leading authorities on American waterfowl.

In 1946, when Dr. Sowls began his studies at the Delta Waterfowl Research Station, a privately endowed outdoor laboratory owned by the North American Wildlife Foundation and operated by the Wildlife Management Institute, many wide gaps existed in the knowledge of the relationship of breeding ducks to their home range. The author, then working toward his doctorate in wildlife management at the University of Wisconsin, studied the waterfowl at Delta for five years in an attempt to plug some of those gaps through intensive study of the waterfowl on one limited area. His studies, presented in this book, developed new techniques and brought out new facts that were startling even to waterfowl biologists, facts of prime importance to the duck hunter or to any one interested in the future of America's waterfowl flocks.

Dr. Sowls studies have shed new light on such factors as predation, reneating, and homing habits of important species of game ducks. They have become the basis for revised hunting regulations and have provided a new understanding of waterfowl problems.

Timber Design and Construction Handbook was prepared by Timber Engineering Company (F. W. Dodge Corporation, New York, pp. 622, \$12.75) to serve two definite purposes: a comprehensive timber design reference, and a practical field handbook.

Written by 25 engineers and specialists, and edited and reviewed by a special nine-member editorial committee, this new handbook should be of interest to anyone concerned with wood design and construction, including architects, engineers, contractors, builders, foresters and other wood utilization specialists.

Timber Design and Construction Handbook is organized into three main sections. The first section covers the fundamental structures and characteristics of wood—its types, grades and ways of preservation to enable the designer to obtain maximum efficiency and economy from

his material. The next section explores and analyzes preliminary considerations, general design procedure, design details, fabrication and erection. Much of this fully-detailed information has never before been available in print. The third section provides design and engineering specifications and tabular data in simplified form, allowing easy conversion for particular grades and species. This gives the user a concise tabular reference to fit combinations of grade, span, and loading.

The Big Blowup by Betty Goodwin Spencer (The Caxton Printers, Ltd., Caldwell, Idaho, pp. 286, \$5.00) recreates in narrative form the anguish, terror and destruction of the Northwest's great fire, the 1910 fire in Region One of the Forest Service. Using Forest Service files, contemporary newspapers, and the memories of old-timers, the author presents a complete and documented account of this big fire.

The fire began on August 20, 1910, when three thousand small, scattered fires, hundreds of blazes, and a hurricane swirled together across north-eastern Washington, northern Idaho, and western Montana to produce the greatest conflagration in the forest history of the United States. For 48 hours this holocaust raged over three million acres of forested land, burning eight billion feet of merchantable timber, razing towns, and taking the lives of 85 people. Rangers and civilians, forests, cities, and transcontinental railroads—all braced themselves in a titanic struggle for survival against flames and wind.

This big fire was a milestone, not only for its record of massive devastation, but for influencing the reorganization of the Forest Service and the fire fighting methods within that organization. Across the country it forced both civilian and governmental acceptance and recognition of the value and necessity of the Forest Service.

In *The Big Blowup* the author moves skillfully from the beauty of the land to the chaos of flames, from men on the trail "hitting the high lonesome" to those who left a half-melted Ingersoll as their only identity.

Ground Cover Plants by Donald Wyman (The Macmillan Company, New York, pp. 175, \$4.75) is the first book to deal exclusively with

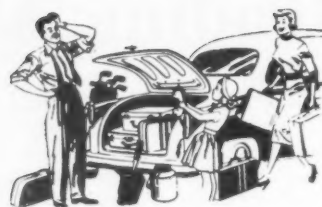
this subject. Based on years of research and testing at the famed Arnold Arboretum, this book is a virtual encyclopedia of those sturdy low-growing plants which will provide a cover for ground on which it is impossible or impractical to grow grass.

In alphabetical order, Dr. Wyman describes more than 200 kinds of woody plants and herbaceous perennials which can be employed to cover the soil. These are plants that will enhance the beauty of any garden, blanket the ground throughout the years, and require a minimum of attention once they have matured. Every phase of planting, growing, and care is discussed, along with hardiness considerations, winter precautions, pruning, and propagation.

Of particular value to gardeners are twenty lists which classify ground covers according to special purposes: for growing in exceptionally sunny or shady spots; for barriers; for sandy soil; for steep banks; for decoration between stepping stones, etc.

The Outdoorsman's Cookbook by Arthur H. Carhart (Macmillan Co. 211 pp. \$2.95) is a revision of a book first published 12 years ago. During that time it is likely that the camp cook has been helped as much by modern developments in the preparation and preservation of foods as has the housewife. Carhart presents clear and simple directions on a wide range of matters, from how to make Texas stew to a discussion of the multiple uses of aluminum foil. General subjects, including cooking fires and grub lists, are covered in some length. The result is a practical and useful book for the camp cook (also for the hubby at home in the kitchen on the little woman's night off).

An old and valuable standby, the *Wood Handbook* (prepared by the U. S. Forest Products Lab. 528 pp. \$2. Supt. of Documents, Wash., D. C.), has been revised and enlarged. Since its first publication in 1935 this handbook has been recognized as a standard reference on the properties and structural uses of wood. The new revision brings things up to date with current engineering advances and new products like laminated wood, insulation board, structural hardboard. Basic subjects such as physical properties of wood, lumber grades, wood preservation, etc., are all covered.



The Forest Service

By **HARRY C. JAMES**

President, The Trailfinders

ONE June afternoon a group of about a hundred young men gathered at a mountain lodge in southern California for a gab-fest reunion. As members of the same outdoor organization for boys they had hiked and climbed and skied and camped together in the high mountain country of the West. That early interest in the outdoors had been sustained, only nowadays they camp and ski and climb and hike with their wives and their children.

The talk soon turned to places where they had camped as boys.

"Do you remember that beautiful meadow with the two small springs on the summit of the ridge in the San Gabriels—the one where we had so many week-end camps?"

Several men nodded as the speaker continued.

"Well, you wouldn't want to camp there now—you ought to see it! They've built a fire road into it, and some car—a Forest Service patrol one, I guess—has driven all over the meadow. It's nothing but a mess of dusty ruts. When I was there last summer, both springs were dry."

This was but the beginning of a catalogue of disastrous camping experiences in the Sierra, the Wasatch, and the San Francisco Peaks . . . One man after another spoke sadly of high mountain meadows, once glorious with alpine flowers, now nothing but rock-studded muddy morasses scarred by innumerable campfires built here, there, and everywhere—or dry and dusty from over-grazing by saddle and pack stock. Every one present seemed able to cite examples of choice campsites misused

Devising a policy to provide necessary recreational opportunities while safeguarding national forests is difficult





Service and Recreation

Our national forests are an American heritage, established for the enjoyment of people in all walks of life, and should not be subjected to abuse

and over-used by hordes of thoughtless, careless vacationers with no innate love of the land.

One of the most articulate men in the group spoke the deep feelings of all present when he said, "The very beauty that lures so many people to these spots is destroyed by their total lack of responsibility toward preserving that beauty."

"And the litterbug has been everywhere," said another. "What can you do about him?"

"I was reading only the other day how much California has to spend to clean up after him."

"Even if you do pick up the litter you can't do much about the scars made by ill-advised campfires."

"That's true. High mountain country—and it's the same with the desert—heals slowly."

"The erosion is unbelievable—."

"Of course, it is. Once you destroy the ground cover of some places in the high country it won't ever come back."

And so the talk went on, bitterly for the most part. The destruction of natural ground cover, the scarring of trees by nails and initials, the cutting of young trees for bough beds (despite modern air mattresses), the pollution of water, the scarcity of wildlife, the danger from gunfire, the erosion, the litter—all came in for outspoken castigation. Unhappily the United States Forest Service was in some cases the target of their verbal missiles, for the national forests of the West had been the scene of most of their camping.

"Is the Forest Service doing anything about all this?" one chap finally asked.

"What can it do?" countered another.

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When Forests Floated Away....



Illustration by Merle Shivers

In spite of the dangers involved in rafting, and sometimes the hazards were unique, raftsmen claimed nothing compared with its delights, adventure and chance to escape from home routine

By FRANCES WILLIAMS BROWIN

If there is anything that a normally peaceable elephant dislikes, it is being interrupted at his bath, particularly when the interruption is provided by a meddlesome timber raft with four or five husky oarsmen aboard. Yet this invasion of privacy is precisely what happened some eighty years ago in the midst of the Delaware River to the stellar attraction of a small traveling circus on its way from Port Jervis, New York, to points westward.

The elephant, who combined a marked distaste for bridges with a passion for getting himself wet, was in the midst of a pleasant enough crossing of the Delaware when the raft, shooting down from headwaters toward Trenton lumber markets on a smart summer freshet, landed squarely on his back, slicing off a portion of his ear in the process. It is barely possible that Jumbo, with subconscious happy memories of the virgin forests of his infancy, was at heart a conservationist who disapproved of the way rafts were denuding the Delaware watershed of its timber. Whatever the reason, he began displaying his annoyance in such unmistakable fashion that the raftsmen, no more anxious than he to continue the close association, promptly nudged his epidermis with their sharp-tipped pike poles to push themselves free.

Jumbo, rightly considering such treatment a further outrage, attempted to turn the tables by climbing aboard the raft, and succeeded to the extent of getting both front feet onto the stern, submerging it. But here the swift current came to the raftsmen's aid, making it impossible for the enraged elephant to maintain his footing on the wet, fast-moving logs. Plopping back into the river with a mighty splash, he gave one final vent to his ire by filling his trunk with water and shooting a farewell shower over his escaping tormentors.

Nothing he could have done could have bothered the raftsmen less than this, for being drenched was all part of a familiar day's work to them. Freshets (without which rafts could not function) usually came when early spring was at its raw worst; and rafting crews, ruled by the river's height, often had to set out in the midst of chilling rains to float their mammoth pine or hemlock craft to the markets two hundred and fifty

miles away. Having no shelter aboard (nor could they have abandoned their posts to use it if they had had it), the men were exposed unprotected for days on end to rain, snow, wind, and nipping cold, with sometimes burning sun to vary the picture. To cover fifty miles or so a day, they had to rise at 3 A.M.; and from then till they tied up for the night, they had no chance to rest, for handling the fifty-foot oars required a man to keep constantly walking or even running back and forth, often soaked to the waist by rough water. Frozen clothing, ice-covered snubbing ropes, and shrunken boots were all old stories to them, so why should they be bothered by a little incident like an angry elephant's shower bath?

Or why, indeed, should they consider it anything out of the ordinary to have to dodge an elephant when by the very nature of the floodwater on which they were dependent they were always having to dodge all kinds of flotsam on their voyages downstream? In a really top-flight freshet there was a motley of houses, barns, furniture, fences, bridges, livestock, haymows, and whatnot, all sharing the right of way with hundreds or even thousands of suddenly liberated rafts. And it was only the surpassing skill of the hardy men at the oars that kept the whole array from winding up in a massive tangle.

On the Delaware (and thus indirectly on the many other rivers which later followed the Delaware's rafting pattern) the venerated ancestor of this rugged breed of river mariners was Daniel Skinner, the pre-Revolutionary "Lord High Admiral of the Delaware." Skinner was the enterprising young ex-seaman who, when he took over from his farmer father twenty-five forest-covered acres in northeastern Pennsylvania, decided that there must be some more profitable way to get rid of those forests than by simply burning them, as his neighbors were doing. Remembering the towering wooden masts of the ships on which he had sailed in the West Indies trade, he cut and trimmed several tall pine trees, dragged them to the river by ox-team, lashed them together, and then jumped into his dug-out canoe with the idea of following them downstream two hundred-odd miles to Philadelphia, where he planned to reap a fortune

by selling them to shipyards as masts.

Only a few miles of frustrating encounters with rocks and turns and capricious currents were enough to make young Skinner abandon his project. Undaunted, however, he promptly worked out a better one. Leaving his canoe at home, he and a helper rode instead a lengthy raft fashioned of six big spars, steering it with oversized oars. The journey to Philadelphia took the two river tourists eight days, and the return hike home through the wilderness consumed another week, but the financial reward of 24£ (about \$120) was very good money indeed in 1764. Besides, the Philadelphians had taken the venturesome young voyager to their hearts, dubbing him with the admiral's title which stuck with him throughout his long years as a rafting magnate, which he promptly became.

Naturally Skinner's success with a whole series of bigger rafts spawned a horde of imitators, but the admiral is reported to have kept the situation well in hand by seeing to it that each newcomer to the field paid him tribute of two bottles of liquor apiece for steersmen and one bottle for oarsmen or hands. Despite this impost the number of countrymen following Skinner's example soon grew until it included nearly every able-bodied man and boy along the upper Delaware's two main branches and tributary creeks. Pioneers were of necessity lumbermen as well as farmers, and most of them were so lacking in cash income that the money they received for floating their logs to downriver markets made rafting the financial mainstay of their economic structure. Cheerfully unaware of the head-shaking their forest-stripping methods were going to cause among conservationists of the future, they spent their winters felling and trimming their choicest, straightest trees and dragging or sluicing them to the riverbank, to be accumulated until the proper time came for building rafts.

The timing of construction was one of the industry's major problems. To move on dry land a log structure 80 to 200 feet long and 20 to 70 feet wide was something which even a race of Paul Bunyans could not do. The only practical solution was to deposit great stores of logs at the banking grounds and then to erupt

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Department foresters conduct instructive trips through the timber harvest areas, where logging practices are conservative if not exemplary



FOREST MANAGEMENT VERSUS RECREATION MANAGEMENT

THE subject of forest management in public recreation areas is growing increasingly important to public agencies in these times of ever-increasing recreational use of all wild lands. The private forest landowners are likewise subjected to the problem of public recreation in forest management areas.

While it is a relatively simple matter in the national parks, with their superlative wilderness characteristics, to set aside recreation areas from all forms of forest management, it is not feasible on many other public lands to find so simple a solution to such a complex problem. By the same token, the private landowner could lock the gate and keep all forms of recreational use out of his productive forest, but this also is too simple a solution to be entirely prac-

With increasing recreational use being made of forest land, foresters should analyze their basic management programs in the light of this fact, and the need for a much wider public understanding of forestry principles

By **HARRY R. WOODWARD**
South Dakota State Forester



In keeping with South Dakota's management program, from 300 to 400 buffalo are harvested each year in the Park



The Needles, one of the unique scenic areas that are preserved as "natural areas." Granite spires are older than the Rockies

Photos by S. D. Dept. Game, Fish and Parks

tical. A look into some of the details of and possible solutions to this broad and complex subject may be worthwhile for administrators of public and private forest areas.

Unfortunately, the modern logger has some unfavorable public opinion to overcome because of some of the destructive methods used by his predecessors. In spite of the fact that he is probably following good forestry and conservation practices, there is somewhat of a tendency on the part of the public to characterize him as a devastator. Modern logging, by-and-large, is not destructive and is doing a splendid job of logging and cleanup in the woods, but the general public doesn't always know that. However, the logger is a businessman, and when operating upon the land of another, he will operate

as profitably as he can within the limits placed upon him by the landowner. In the case of public land, if the administrative agency does not have strict regulations, he may invoke some cost-saving practices of an undesirable nature even though he would probably follow excellent forestry practices on his own lands.

Perhaps as a result of some logging practices of the past, there are some elements in the public who feel that to touch an ax to a single tree is desecration. These extremists probably represent a very small segment of the population, but they can be vocal and they can present an emotional story that could influence large segments of the public. The extremist would probably prefer to reserve every available forest acre as a wilderness for future generations without regard to any type of resource management.

The administrator, then, and his forester must weigh between two viewpoints and find an answer for the logical and successful management of the forests entrusted to their care. If they choose to cut heavily, without regard for sustained yield and without regard to recreational needs and public opinion, they can expect a strong reaction in public sentiment against all forestry activities. If, on the other hand, they yield to the extremist viewpoint and lock up their forest from all forms of beneficial use, they will find that they are losing valuable revenue while at the same time increasing

the cost of protection. (It is much more costly in dollars and area burned to have men walk 20 miles into rugged terrain to fight fire than it is to drive motorized equipment to the site.) The forest itself will degenerate through decadence, disease and insect attack, and in most cases even the recreational values of the area are diminished or unutilized through the lack of access. A continued operation of this sort could likewise arouse public opinion against the policy of the administrator.

However, if the administrator and his forester get their heads together and find a means of encouraging recreational use, while at the same time harvesting timber under a system requiring very exacting cutting practices, the greatest benefit will be derived from the forest. In the first place, recreational use will normally only occupy such a small percentage of the total area of the forest that completely reserving roadside strips, scenic areas and lake shores will not be a major deterrent to timber harvest. In the second place, the public can be exposed to forestry in such a manner that they will visualize the needs for and benefits of a sound timber harvest program.

This problem has been resolved in South Dakota, where in one of the largest and most popular state parks in the nation, a forest management program has been established and operated during the last ten years.

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Horse skidding is used extensively to prevent damage to ground cover of Park





Forester's Notebook

By **KENNETH B. POMEROY**
Chief Forester, AFA

FIRE prevention crusader Boyce Holleman, district attorney in Wiggins, Mississippi, using estimates provided by the U. S. Forest Service, points out that eighty acres of well-managed and well-stocked timberland will provide one man with full-time employment. Thus 8,000 acres of well-managed timberland will provide one hundred new jobs and each hundred new workers will make the following changes in a community: 296 more jobs; 51 more school children; 112 more householders; \$590,000 more personal income per year; \$270,000 more bank deposits; 170 more passenger cars registered; 174 more workers employed; 4 more retail establishments; \$360,000 more retail sales per year.

The importance of small woodlands in supplying future requirements for high-quality forest products was indicated last month when the Forest Research Advisory Committee recommended a new and expanded research program by the U. S. Department of Agriculture in this critical phase of the nation's forest economy. This 11-man advisory group, serving without compensation under the chairmanship of Gustave P. Backman, secretary of the Salt Lake City Chamber of Commerce, also recommended increased research in protection of forests against fire, insects and disease; forest range and watershed management; multiple use of all forest resources; and utilization of forest products. Others in attendance this year were T. E. Bercaw, Bogalusa, La.; S. T. Dana, Ann Arbor, Mich.; Seth Gordon, Sacramento, Calif.; C. C. Heritage, Tacoma, Wash.; Harley Langdale, Jr., Valdosta, Ga.; P. Dewey Lyman, White River Junction, Vt.; Lloyd E. Partain, Philadelphia, Pa.; Otto J. Wolff, Rapid City, S. D.; and C. V. Youngquist, Columbus, Ohio.

Incidentally 585 opportunities for forest research are listed in "Contract Research, a Method for Applying Science to the Problems of Your Company," by the Battelle Memorial Institute of Columbus, Ohio.

Research designed to tap six billion board feet of hardwoods now standing unused in California forests is getting underway at the University of California Forest Products



Laboratory, according to Fred E. Dickinson, director. "With population increases pushing up demand and higher freight rates making Eastern hardwoods more expensive, California furniture makers are looking for sources closer at hand," he said.

Oregon woods other than Douglas-fir may find greater use in railway cross-ties as a result of a cooperative study by Robert D. Graham, senior research associate, Oregon Forest Laboratory and R. M. Alpen, manager wood preservation, Southern Pacific Company. Third year inspection of test ties in mainline tracks showed 97 percent of the incense cedar ties to be in good condition; white fir 81; Douglasfir 79; Shasta red fir 75; western hemlock 70; lodgepole pine 65; sitka spruce 50; and mountain hemlock 45. The nation's railroads, with nearly one billion cross-ties in place today, spend about \$200,000,000 annually in replacing some 40 million ties.

White pine can be planted successfully in eastern Kentucky and will make reasonably good height growth in the early years if given adequate release after initial establishment. A survey by Ivan L. Sander, Central States Forest Experiment Station, of a 17-year old plantation in the Cumberland National Forest revealed that plantings on northerly aspects had 4 percent better survival and produced trees 2 feet taller than plots on southerly aspects. Height growth was best on the lower one-third of the slope, while survival was best on the middle one-third of the slope and poorest on the upper one-third. Five trees produced at least one cone each in 1956, so there is a possibility that planted white pines on the cliffs may seed in lower slopes naturally.

Tender roots of slash and sand pine seedlings can withstand immersion for 25 minutes in hot water at a temperature of 116° F. without ill effects according to recent tests by A. C. Gentile and R. W. Johansen of the Lake City (Florida) Research Center. Temperatures of 125° F. resulted in almost complete mortality of both species. These tests, designed to prevent accidental distribution of destructive, root-infesting nematodes from forest nurseries to planting sites may be of importance to the expanding Soil Bank program. In 1955 the Lake City nursery lost nearly all its seedling stock in nematode infested seedbeds.

The average price of pine pulp-

wood in five southeastern states rose, during the past decade, from \$9.90 to \$15.25 per cord, f.o.b. railroad car, and hardwood from \$9.50 to \$12.65 according to A. S. Todd, Jr., of the Southeastern Forest Experiment Station. In the same period pulpwood consumption in the states surveyed was more than doubled, reaching a total of 10 million cords in 1955.

Farmers own about 70 percent of the 225,500 acres planted solely to Christmas trees. In addition they own 35 percent of the naturally wooded lands which produce 87 percent of the Christmas trees cut in this country. More than 37 million Christmas trees, supporting a \$47.5 million retail business, were used in 1955 as compared to 28 million in 1947. The most popular are: Douglasfir, balsam fir, eastern redcedar, black spruce, and Scotch pine, in that order.

Tennessee boasts 152 varieties of native trees, a number made possible by the great range in environmental conditions from the banks of the Mississippi River to the peaks of the Great Smoky Mountains.

Do investments in New England forests bring a rate of return commensurate with the risks of ownership? Do they compare with similar investments in the Lake States and the South? Professor Frederick Amling, working under a research grant by the Federal Reserve Bank of Boston, says the answers depend upon the type and location of the land. Forest ownership in New England can be just as profitable if intelligent decisions are made about original investments. However, accurate information is needed about growth rates, market prices, and operating costs. For a complete report see the October, 1956, issue of "Business Review" published by the Federal Reserve Bank of Boston.

The public demand for more recreational facilities is indicated by the \$5,000,000 increase for state parks in the proposed budget for the next fiscal year of the Michigan Conservation Department. The total request for all conservation activity is for \$23,782,222 with five-sixths of the \$6,000,000 increase tagged for parks.

Damage to vegetation caused by a single smog has been observed from Ventura, California, to the Mexican border, a distance of approximately 200 miles. Losses in Los Angeles County, to vegetable crops alone, were estimated by one observer at \$480,000 for one year. Under certain

atmospheric conditions, unburned gasoline vapors mixed with ozone cause discoloration and damage to growing plant cells. Thus repeated smogs betray the frequency of their occurrence by the distance between discolored bands on the leaves.

Federal administrators have already set aside about 13 percent of all national forest land in the states of Oregon and Washington for some type of natural, primitive, or wilderness area to satisfy the needs of outdoor enthusiasts. These tracts aggregate some three million acres. Even if there were no interest whatsoever in wild areas, substantial acreages would always remain in wilderness because of sheer inaccessibility.

Clues to the question when to harvest a tree or a stand are provided in Technical Bulletin No. 1146, "Financial Maturity: A Guide to Profitable Timber Growing," by William A. Duerr, John Fedkiw and Sam Guttenberg of the Southern Forest Experiment Station. The financial maturity idea can be applied to any species and, if properly adapted, under any silvicultural system and for any product or combination of products. The chief problem is to determine the rate of value increase that can be expected of trees over a given period of time. Once these rates are determined, simplified marking guides can be prepared to define the diameters at which trees of given species, vigor, grade, and height are economically ripe for harvest for desired alternative rates of return.

Eight Navy Avenger torpedo bombers (TBM-3's) have been transferred from the Navy to the Forest Service for use in protecting the national forests. All but one plane will be used for fire fighting in the West, particularly southern California where recent tests showed that cascading of water or chemicals from "air tankers" helps bring forest fires under control. The eighth plane will be used for research in forest insect spraying.

It is possible for a tree 35 feet in height, with a leaf surface of two thousand square feet, to transpire over 35 gallons of water per day in midsummer or over a thousand gallons during the hottest month of the year, according to Dr. Paul J. Kramer of Duke University. According to the latest theories on loss of water by evaporation and transpiration, it makes little difference what the type of vegetation is so

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How Ralph Smith Logging Co., Gold Beach, Oregon,

YARDS and LOADS out 20 mbf

...WITH ONLY ONE HELPER!



Here's amazing manpower and horsepower efficiency! Only International® users can match this record for performance and profits!



The International Drott TD-18 Skid-Grapple easily handles a 2000-bf log. Note how the patented top grab-arm clamps the load securely—gives you safe, positive, hydraulic load control. "By switching bucket with Skid-Grapple, we have a unit to dig and load rock to cover our winter haul roads," adds Mr. Smith.



Ralph Smith's International TD-24 torque converter crawler arrives at the 50-foot-wide, river-bottom canyon landing — with a good-sized fir log. Canyon slopes run from 50%, to much steeper! "I traded my first TD-24's in '55, after 1,600 hours of tough logging yearly, for five years—and total repair parts cost for both units was just about \$1,800," states Mr. Smith.

of Douglas Fir logs daily

Ralph Smith describes his show this way:

"With only one helper, I'm yarding and loading out 20,000 board feet of Douglas fir logs daily. I doze a way to the fallen logs with the TD-24 torque converter crawler. My helper sets the chokers.

"At the landing, he bucks tree logs into smaller lengths, while I take the International Drott TD-18 Skid-Grapple and put the logs on the waiting trucks."

"It's a money-making set-up"

"This is a money-making set-up and the International equipment makes it possible. The big TD-24, with full-time live steering on both tracks puts roads in fast, gets big log loads out faster than any other tractor in the big timber country.

"The International Drott TD-18 Skid-Grapple can

stockpile big or small logs for different mills. It can pick out 'pinched' or partly buried logs. Now, loading is a one-man job, compared to the three men an ordinary heel boom requires.

"International equipment has done very well by me."

Prove what it means in road mileage to the timber, logs at the landing and dollars in your pocket to command an International TD-24's *power-traction* balance and exclusive Planet-Power steering. Try this fingertip full-load steering that gives you full-time "live" power on both tracks—try instant Hi-Lo shifting —and *compare*. Count the International Drott Skid-Grapple's man-saving, production-boosting advantages —over anything else in the woods! See your International Construction Equipment Distributor for a demonstration!



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A COMPLETE POWER PACKAGE INCLUDING: Crawler, Wheel, and Side-Boom Tractors . . . Self-Propelled Scrapers and Bottom-Dumps . . . Crawler and Rubber-Tired Loaders . . . Off-Highway Trucks . . . Diesel and Carbureted Engines . . . Motor Trucks

A Bill

To establish on public lands of the United States a National Wilderness Preservation System for the permanent good of the whole people, to provide for the protection and administration of the areas within this System by existing Federal agencies and for the gathering and dissemination of information to increase the knowledge and appreciation of wilderness for its appropriate use and enjoyment by the people, to establish a National Wilderness Preservation Council, and for other purposes.

Be it enacted, etc., That, in order to secure for the American people of present and future generations the benefits of an enduring resource of wilderness, there is hereby established a National Wilderness Preservation System. As hereinafter provided, this System shall be composed of areas in the United States and its Territories and possessions retaining their natural primeval environ-

ment as wilderness of those areas federally owned or controlled that are within national parks, national forests, national wildlife refuges, or other public lands, and that have so far retained under their Federal administration their primeval character. It is pursuant to this policy and sanction that the National Wilderness Preservation System is established. Within the units of this System designated for inclusion by this Act, and in those that may later be designated in accordance with its provisions, the preservation of wilderness shall be paramount.

(c) A wilderness, in contrast with those areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammelled by man, where man himself is a member of the natural community who visits but does not remain and whose travels leave only trails.

For the purposes of this act the term "wilderness" shall include:

ervation System (hereafter referred to in this section as the System) shall comprise (subject to preexisting private rights, if any) the Federally owned or controlled areas of land and water provided for in this section and the related airspace reservations.

National Forest Areas

(a) The System shall include the following roadless, wild, and wilderness areas within the national forests: Caribou, Little Indian Sioux, and Superior Roadless Areas, Superior National Forest, Minn.; Chiricahua Wild Area, Coronado National Forest, Ariz.; Galiuro Wild Area, Crook National Forest, Ariz.; Sierra Ancha Wild Area, Tonto National Forest, Ariz.; **Maroon Bells-Snowmass Wild Area, White River National Forest, Colorado;** Mount Zirkel Dome Peak Wild Area, Routt National Forest, Colo.; Gates of the Mountains Wild Area, Helena National Forest, Mont.; San Pedro Parks Wild Area, Santa Fe National Forest, N. Mex.; Linville Gorge Wild Area,

NATIONAL WILDERNESS

As a service to members, text of S. 4013 (The Humphrey Bill) is submitted for study.

New changes to be submitted to 85th Congress in revised bill are in boldface type

ment and influence, which areas shall serve the public purposes of recreational, scenic, scientific, educational, conservation, and historical use and enjoyment by the people in such manner as will leave them unimpaired for future use and enjoyment as wilderness.

(b) The Congress recognizes that an increasing population, accompanied by expanding settlement and growing mechanization, is destined to occupy and modify all areas within the United States, its Territories, and possessions except those that are set apart for preservation and protection in their natural condition. Such preservation of areas of wilderness is recognized as a desirable policy of the Government of the United States of America for the health, welfare, and happiness of its citizens of present and future generations.

It is accordingly declared to be the policy of Congress (1) to secure the dedication of an adequate system of areas of wilderness to serve the recreational, scenic, scientific, educational, and conservation needs of the people, and (2) to provide for the protection of these areas in perpetuity and for the gathering and dissemination of information regarding their use and enjoyment as wilderness. Pursuant to this policy, the Congress gives sanction to the continued

(1) The wilderness, wild, roadless, and primitive areas as presently designated by the Secretary of Agriculture or the Chief of the Forest Service within the national forests;

(2) Those units within the National Park System herein or hereafter designated as units of the National Wilderness Preservation System, except those portions set aside hereunder for roads, **motor trails, buildings, accommodations for visitors, and administrative installations;**

(3) The national wildlife refuges and ranges herein or hereafter designated as units of the National Wilderness Preservation System, except those portions set aside hereunder for roads and buildings and other **installations for administration and protection of the refuge or range for wildlife;**

(4) The areas within Indian reservations classified as roadless or wild and included in the National Wilderness Preservation System with the consent of the tribal council or other duly constituted authority; and

(5) Such other areas as shall be designated for inclusion in the National Wilderness Preservation System in accordance with the provisions of this Act.

National Wilderness Preservation System

Pisgah National Forest, N. C.; Gearhart Mountain Wild Area, Fremont National Forest, Oreg.; Kalmiopsis Wild Area, Siskiyou National Forest, Oreg.; Mount Hood Wild Area, Mount Hood National Forest, Oreg.; Mountain Lakes Wild Area, Rogue River National Forest, Oreg.; Strawberry Mountain Wild Area, Malheur National Forest, Oreg.; Goat Rocks Wild Area, in portions of Gifford Pinchot and Snoqualmie National Forests, Wash.; Mount Adams Wild Area, Gifford Pinchot National Forest, Wash.; Mazatzal Wilderness Area, Tonto National Forests, Ariz.; Superstition Wilderness Area, in portions of the Crook and Tonto National Forests, Ariz.; Marble Mountain Wilderness Area, Klamath National Forest, Calif.; Bob Marshall Wilderness Area, in portions of the Flathead and Lewis and Clark National Forests, Mont.; Gila Wilderness Area, Gila National Forest, N. Mex.; Pecos Wilderness Area, in portions of the Santa Fe and Carson National Forests, N. Mex.; Eagle Cap Wilderness Area, in portions of Wallowa and Whitman National Forests, Oreg.; North Absaroka Wilderness Area and South Absaroka Wilderness Area, both in the Shoshone National Forest, Wyo.; Teton Wilderness Area, Teton National Forest, Wyo.

Additional wilderness and wild areas

may be designated for inclusion in this System by the Secretary of Agriculture. Such designations shall be reported, with maps and descriptions, to the secretary of the National Wilderness Preservation Council established hereunder. These designations by January 1, 1966, shall include, but shall not necessarily be limited to, the following areas within the national forests classified as primitive by the Department of Agriculture on January 1, 1956, with such modifications in boundaries as may be made upon reclassification as wilderness or wild:

Areas Classified Primitive

Blue Range Primitive Area, Apache and Crook National Forests, Arizona and New Mexico; Mount Baldy Primitive Area, Apache National Forest, Arizona; Pine Mountain Primitive Area, Prescott and Tonto National Forests, Arizona; Sycamore Canyon Primitive Area, Cocino, Kaibab, and Prescott National Forests, Arizona; Agua Tibia Primitive Area, Cleveland National Forest, California;

Colorado; Rawah Primitive Area, Roosevelt National Forest, Colorado; San Juan Primitive Area, San Juan National Forest, Colorado; Uncompahgre Primitive Area, Uncompahgre National Forest, Colorado; Upper Rio Grande Primitive Area, Rio Grande National Forest, Colorado; West Elk Primitive Area, Gunnison National Forest, Colorado; Wilson Mountains Primitive Area, San Juan National Forest, Colorado; Idaho Primitive Area, Challis, Salmon, and Payette National Forests, Idaho; Sawtooth Primitive Area, Boise, Challis, and Sawtooth National Forests, Idaho; Selway-Bitterroot Primitive Area, Clearwater, Nezperce, Lolo, and Bitterroot National Forests, Idaho and Montana; Absaroka Primitive Area, Gallatin National Forest, Montana; Anaconda-Pintlar Primitive Area, Beaverhead, Bitterroot and Deerlodge National Forests, Montana; Bear-tooth Primitive Area, Gallatin and Custer National Forests, Montana; Cabinet Mountains Primitive Area, Cabinet and Kootenai National Forests, Montana;

days public notice in accordance with section 4 of the Administrative Procedure Act of 1946, 60 Stat. 238, U.S.C. 5:1003 and the holding of a public hearing, if requested, and shall be reported with map and description to the secretary of the said National Wilderness Preservation Council and shall take effect as provided in subsection (f) below.

National Park System Areas

(b) The System shall include the following units of the National Park System: Acadia National Park, Maine; Arches National Monument, Utah; Badlands National Monument, S. Dak.; Big Bend National Park, Tex.; Black Canyon of the Gunnison National Monument, Colo.; Bryce Canyon National Park, Utah; Capitol Reef National Monument, Utah; Carlsbad Caverns National Park, N. Mex.; Cape Hatteras National Seashore Recreational Area, N. C.; Channel Islands National Monument, Calif.; Chiricahua National Monument, Ariz.; Colorado National Monument, Colo.; Crater

PRESERVATION ACT

Caribou Peak Primitive Area, Lassen National Forest, California; Cucamonga Primitive Area, San Bernardino National Forest, California; Desolation Valley Primitive Area, Eldorado National Forest, California; Devil Canyon-Bear Canyon Primitive Area, Angeles National Forest, California; Emigrant Basin Primitive Area, Stanislaus National Forest, California; High Sierra Primitive Area, Inyo, Sierra, and Sequoia National Forests, California; Hoover Primitive Area, Toiyabe and Inyo National Forests, California; Middle Bel-Yolla Bolly Primitive Area, Mendocino and Trinity National Forests, California; Mount Dana-Minarets Primitive Area, Inyo and Sierra National Forests, California; Salmon Trinity Alps Primitive Area, Klamath, Shasta and Trinity National Forests, California; San Geronio Primitive Area, San Bernardino National Forest, California; San Jacinto Primitive Area, San Bernardino National Forest, California; San Rafael Primitive Area, Los Padres National Forest, California; South Warner Primitive Area, Modoc National Forest, California; Thousand Lake Valley Primitive Area, Lassen National Forest, California; Ventana Primitive Area, Los Padres National Forest, California; Flat Tops Primitive Area, White River National Forest, Colorado; Gore Range-Eagle Nest Primitive Area, Arapaho and White River National Forests, Colorado; La Garita-Sheep Mountain Primitive Area, Gunnison, Rio Grande, and San Isabel National Forests,

Mission Mountains Primitive Area, Flathead National Forest, Montana; Spanish Peaks Primitive Area, Gallatin National Forest, Montana; Black Range Primitive Area, Gila National Forest, New Mexico; White Mountain Primitive Area, Lincoln National Forest, New Mexico; Mount Jefferson Primitive Area, Deschutes, Mt. Hood, and Willamette National Forests, Oregon; Three Sisters Primitive Area, Deschutes and Willamette National Forests, Oregon; High Uintas Primitive Area, Ashley and Wasatch National Forests, Utah; North Cascade Primitive Area, Chelan and Mt. Baker National Forests, Washington; Bridger Primitive Area, Bridger National Forest, Wyoming; Cloud Peak Primitive Area, Bighorn National Forest, Wyoming; Glacier Primitive Area, Shoshone National Forest, Wyoming; Popo Agie Primitive Area, Shoshone National Forest, Wyoming; Stratified Primitive Area, Shoshone National Forest, Wyoming.

Addition to or modification, or elimination of wilderness, wild, or roadless areas shall be in accordance with such regulations as the Secretary of Agriculture shall establish in conformity with the purposes of this Act. Copies of such regulations and any subsequent amendments shall be forwarded to and filed by the Secretary of the National Wilderness Preservation Council established hereunder. Any addition, modification, or elimination of any national forest area or part thereof, to, in, or from the System shall be made only after not less than 90

Lake National Park, Oreg.; Craters of the Moon National Monument, Idaho; Death Valley National Monument, Calif. and Nev.; Devils Postpile National Monument, Calif.; Dinosaur National Monument, Colo. and Utah; Everglades National Park, Fla.; Glacier National Park, Mont.; Glacier Bay National Monument, Alaska; Grand Canyon National Park and Grand Canyon National Monument, Ariz.; Grand Teton National Park, Wyo.; Great Smoky Mountains National Park, N. C. and Tenn.; Hawaii National Park, T. H.; Isle Royale National Park, Mich.; Joshua Tree National Monument, Calif.; Katmai National Monument, Alaska; Kings Canyon National Park, Calif.; Lassen Volcanic National Park, Calif.; Lava Beds National Monument, Calif.; Mammoth Cave National Park, Ky.; Mesa Verde National Park, Colo.; Mount McKinley National Park, Alaska; Mount Rainier National Park, Wash.; Olympic National Park, Wash.; Organ Pipe Cactus National Monument, Ariz.; Petrified Forest National Monument, Ariz.; Rocky Mountain National Park, Colo.; Saguaro National Monument, Ariz.; Sequoia National Park, Calif.; Shenandoah National Park, Va.; Theodore Roosevelt National Memorial Park, N. Dak.; White Sands National Monument, N. Mex.; Wind Cave National Park, S. Dak.; Yellowstone National Park, Idaho, Mont., and Wyo.; Yosemite National Park, Calif.; Zion National

(Turn to page 45)

NATIONAL FOREST AREAS

ROADLESS AREAS

- 1 Caribou
- 2 Little Indian Sioux
- 3 Superior

WILD AREAS

- 4 Chiricahua
- 5 Galiuro
- 6 Sierra Ancha
- 7 Mount Zirkle Dome Peak
- 8 Gates of the Mountains
- 9 San Pedro Parks
- 10 Linville Gorge
- 11 Gearhart Mountain
- 12 Kalmiopsis
- 13 Mount Hood
- 14 Mountain Lakes
- 15 Strawberry Mountain
- 16 Goat Rocks
- 17 Mount Adams

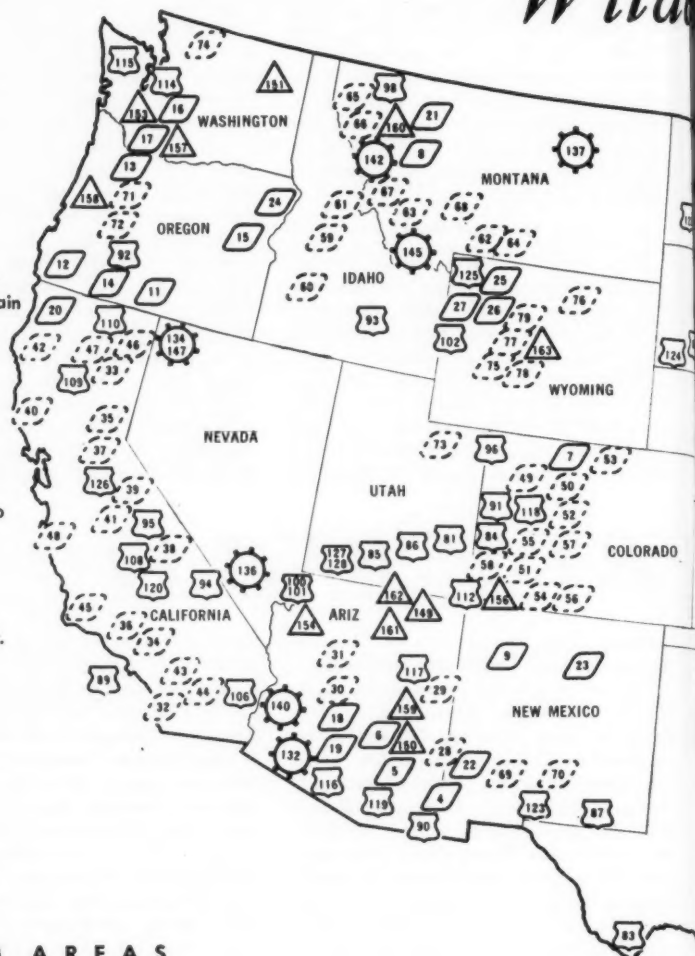
WILDERNESS AREAS

- 18 Mazatzal
- 19 Superstition
- 20 Marble Mountain
- 21 Bob Marshall
- 22 Gila
- 23 Pecos
- 24 Eagle Cap
- 25 North Absaroka
- 26 South Absaroka
- 27 Teton

PRIMITIVE AREAS

- 28 Blue Range
- 29 Mount Baldy
- 30 Pine Mountain
- 31 Sycamore Canyon
- 32 Agua Tibia
- 33 Caribou Peak
- 34 Cucamonga
- 35 Desolation Valley
- 36 Devil Canyon-Bear Canyon

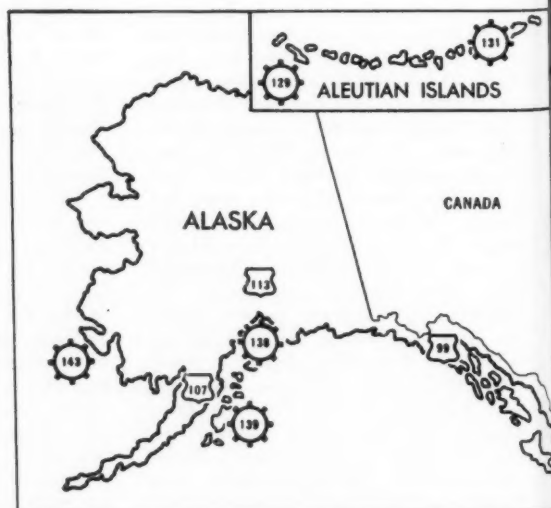
- 37 Emigrant Basin
- 38 High Sierra
- 39 Hoover
- 40 Middle Eel-Yolla Bolly
- 41 Mount Dana-Minarets
- 42 Salmon Trinity Alps
- 43 San Geronio
- 44 San Jacinto
- 45 San Rafael
- 46 South Warner
- 47 Thousand Lake Valley
- 48 Ventana
- 49 Flat Tops
- 50 Gore Range-Eagle Nest
- 51 La Garita-Sheep Mountain
- 52 Maroon-Snowmass
- 53 Rawah
- 54 San Juan
- 55 Uncompahgre
- 56 Upper Rio Grande
- 57 West Elk
- 58 Wilson Mountains
- 59 Idaho
- 60 Sawtooth
- 61 Selway-Bitterroot, Idaho
- 62 Absaroka
- 63 Anaconda-Pintlar
- 64 Beartooth
- 65 Cabinet Mountains
- 66 Mission Mountains
- 67 Selway-Bitterroot, Mont.
- 68 Spanish Peaks
- 69 Black Range
- 70 White Mountain
- 71 Mount Jefferson
- 72 Three Sisters
- 73 High Uintas
- 74 North Cascade
- 75 Bridger
- 76 Cloud Peak
- 77 Glacier
- 78 Popo Agie
- 79 Stratified



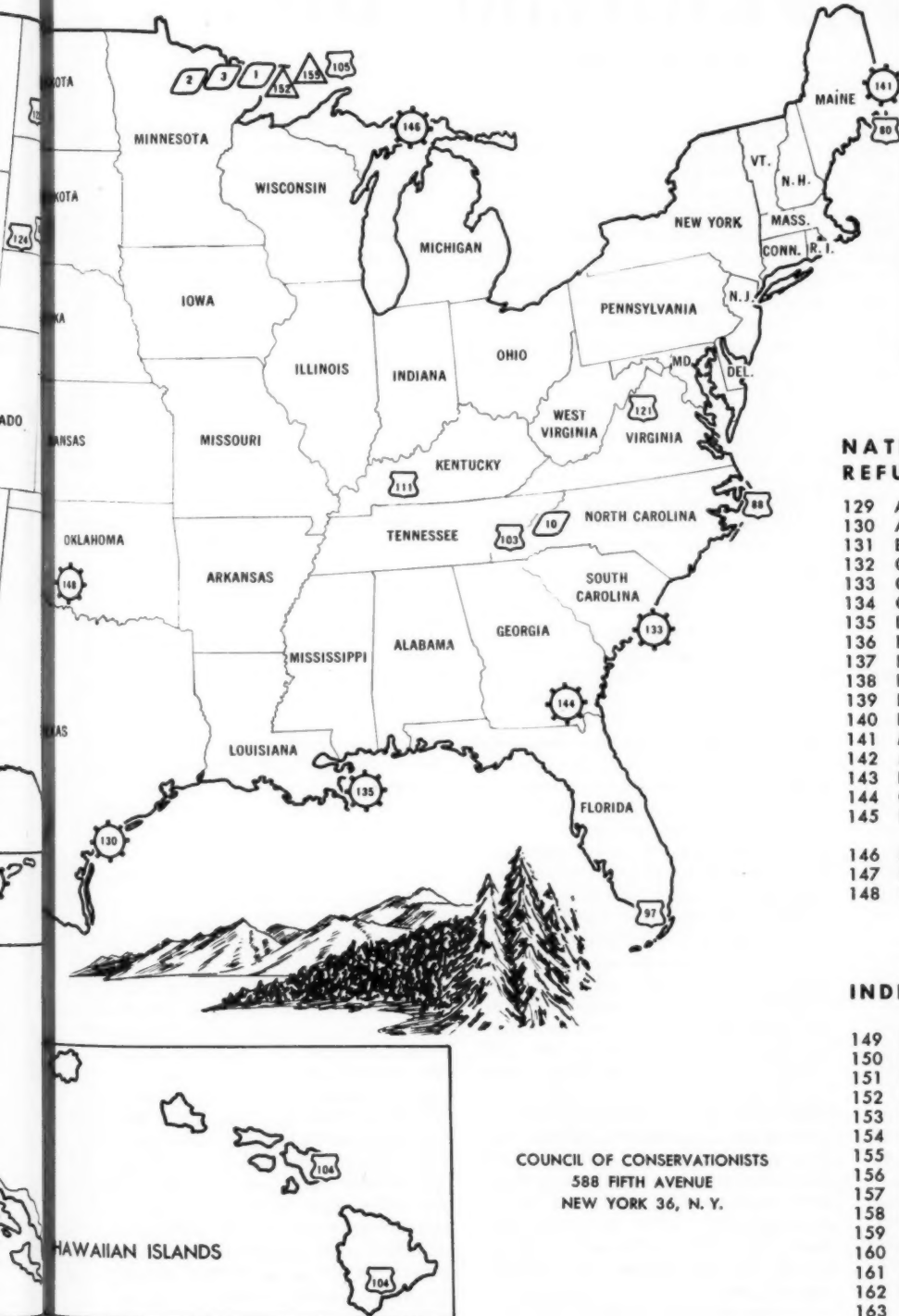
Wilderness

NATIONAL PARK SYSTEM AREAS

- 80 Acadia National Park
- 81 Arches National Monument
- 82 Badlands N.M.
- 83 Big Bend N.P.
- 84 Black Canyon of the Gunnison N.M.
- 85 Bryce Canyon N.P.
- 86 Capitol Reef N.M.
- 87 Carlsbad Caverns N.P.
- 88 Cape Hatteras National Seashore Recreational Area
- 89 Channel Islands N.M.
- 90 Chiricahua N.M.
- 91 Colorado N.M.
- 92 Crater Lake N.P.
- 93 Craters of the Moon N.M.
- 94 Death Valley N.M.
- 95 Devils Postpile N.M.
- 96 Dinosaur N.M.
- 97 Everglades N.P.
- 98 Glacier N.P.
- 99 Glacier Bay N.M.
- 100 Grand Canyon N.P.
- 101 Grand Canyon N.M.
- 102 Grand Teton N.P.
- 103 Great Smoky Mountains N.P.
- 104 Hawaii N.P.
- 105 Isle Royale N.P.
- 106 Joshua Tree N.M.
- 107 Katmai N.M.
- 108 Kings Canyon N.P.
- 109 Lassen Volcanic N.P.
- 110 Lava Beds N.M.
- 111 Mammoth Cave N.P.
- 112 Mesa Verde N.P.
- 113 Mount McKinley N.P.
- 114 Mount Rainier N.P.
- 115 Olympic N.P.
- 116 Organ Pipe Cactus N.M.
- 117 Petrified Forest N.M.
- 118 Rocky Mountain N.P.
- 119 Saguaro N.M.
- 120 Sequoia N.P.
- 121 Shenandoah N.P.
- 122 Theodore Roosevelt National Memorial Park
- 123 White Sands N.M.
- 124 Wind Cave N.P.
- 125 Yellowstone N.P.
- 126 Yosemite N.P.
- 127 Zion N.P.
- 128 Zion N.M.



Wilderness Preservation System



LEGEND

NATIONAL FOREST AREAS

1 thru 79

3 Roadless Areas

14 Wild Areas

10 Wilderness Areas

52 Primitive Areas; (to become part of the system after further study and reclassification)

NATIONAL PARK SYSTEM AREAS

80 thru 128

26 National Parks

21 National Monuments

1 Recreational Area

1 Memorial Park

NATIONAL WILDLIFE REFUGES AND RANGES

129 thru 148

13 National Wildlife Refuges

7 Game Ranges

INDIAN RESERVATION AREAS

149 thru 163

12 Roadless Areas

3 Wild Areas

NATIONAL WILDLIFE REFUGES AND RANGES

- 129 Aleutian Islands National Wildlife Refuge
- 130 Aransas N.W.R.
- 131 Bogoslof N.W.R.
- 132 Cabeza Prieta Game Range
- 133 Cape Romain N.W.R.
- 134 Charles Sheldon Antelope Range
- 135 Delta N.W.R.
- 136 Desert Game Range
- 137 Fort Peck Game Range
- 138 Kenai National Moose Range
- 139 Kodiak N.W.R.
- 140 Kofa Game Range
- 141 Moosehorn N.W.R.
- 142 Montana National Bison Range
- 143 Nunivak N.W.R.
- 144 Okefenokee N.W.R.
- 145 Red Rock Lakes Migratory Waterfowl Refuge
- 146 Seney N.W.R.
- 147 Sheldon National Antelope Refuge
- 148 Wichita Mountains W.R.

INDIAN RESERVATION AREAS

- 149 Black Mesa Roadless Area
- 150 Black River R.A.
- 151 Columbia-San Pail Divide R.A.
- 152 Fort Charlotte Wild Area
- 153 Goat Rocks R.A.
- 154 Grand Canyon R.A.
- 155 Grand Portage W.A.
- 156 Mesa Verde R.A.
- 157 Mount Adams W.A.
- 158 Mount Jefferson R.A.
- 159 Mount Thomas R.A.
- 160 Mission Range R.A.
- 161 Painted Desert R.A.
- 162 Rainbow Bridge R.A.
- 163 Wind River Mountains R.A.

COUNCIL OF CONSERVATIONISTS
588 FIFTH AVENUE
NEW YORK 36, N. Y.

Without coming out for or against the Humphrey Wilderness Bill in its present form, the Director of the National Wildlife Federation raises a series of questions which he directs to American Forests Magazine

THE WILDERNESS BILL . .

By ERNEST SWIFT

IT is apparent that the battle lines are being drawn on the wilderness bill. Whether the opposition is to the wilderness bill as introduced in the last session of Congress, or to a wilderness philosophy, cannot be determined until all and sundry stand to be counted.

On June 7, 1956, on behalf of Senators Neuberger and Morse of Oregon, Smith of Maine, Lehman of New York, Duff of Pennsylvania, Douglas of Illinois, Kuchel of California, Mundt of South Dakota and Laird of West Virginia, Senator Hubert Humphrey of Minnesota, introduced Bill S. 4013, a bill to establish on public lands of the United States a National Wilderness Preservation System. Congressmen John P. Saylor of Pennsylvania, Lee Metcalf of Montana, Henry S. Reuss of Wisconsin, and George P. Miller of California, introduced the same measure in the House.

Even before the actual introduction of the bill, the National Chamber of Commerce, The American Forestry Association and segments of private industry were raising questions as to its justification.

There have been several comments in *American Forests*, the official organ of The American Forestry Association. In the November, 1956, issue the magazine published open letters which speak on behalf of the bill, and with them editorial comments which question it. These letters are from Senator Humphrey; Olaus Murie, president of The Wilderness Society; Charles Haines, Judge (retired), Superior Court, San Diego, California; and Charles Porter, Tamworth, New Hampshire.

Quoting from the editor's note: "... It comes back to the original question, 'Why is this legislation necessary?' On national forests," the magazine states, "the career Forest Service professional has administered these lands—including the wilderness areas he created—both intelligently and well. He does this under multiple use in which we believe, as

opposed to the locking up or setting aside of specific areas for specific purposes by Congressional action in which we do not believe. Success of this program," the comment continues, "has been due to the elasticity of a management pattern as set up and maintained under the Executive Branch. . . . Certainly there will be boundary adjustments and sometimes professional decisions will favor one group, sometimes another. The important thing is that those decisions will be based on professional criteria and facts by dedicated men who believe in the 'greatest good for the greatest number'. . . . Who can do the job better?"

Now let us take these questions, statements and assertions down the line and analyze them.

Why is This Legislation Necessary?

So far as I know there is little or no quarrel with the present administration of wilderness areas within the national forests. If anything, there should be honest commendation, but these wilderness areas are now established within the framework of the Forest Service authority, and it is known to all that the policies of any public agency are subject to the pressures of many interests. They are also subject to the philosophies of the men who will run them in the future. It is also a well-known fact that most public agencies desire broad managerial powers, to which there is a great deal of merit and substance. But there is inherent in this philosophy the danger of rule by man instead of rule by law.

Staff members of the AFA have stated their belief in the wilderness philosophy, but making inquiry in a friendly discussion: Does the AFA believe that the present Forest Service wilderness policy is a sufficient guarantee to hold these areas in perpetuity? Does the AFA believe that the wilderness policy would be impossible to abolish through pressures? If such pressures were exerted, what stand would the

AFA take? Does the AFA believe in wilderness areas simply as an abstract philosophy, or as a practical land management objective?

Does the AFA believe in preserving these wilderness areas indefinitely or simply until the lumbering industry decides it needs them?

It is stated that the Forest Service professionals created the wilderness areas. Leaving out any part that the Almighty had to do with their creation, just who took whom up on the mountain top to show the kingdoms of the earth—the Forest Service or the wilderness advocates?

In truth, it was both sides cooperating. John Muir before there was a Forest Service; later Aldo Leopold and Bob Marshall, pioneers within the service whose early crusading was not always welcomed and accepted within their own ranks, but nevertheless was effective. On the other side there were such men as Howard Zahniser, Olaus Murie, and Sig Olson. From my own knowledge, I know that the wilderness advocates have done considerable nudging for the creation and preservation of wilderness.

It is repeatedly stated as a sacred tenet in the general discussions of public domain that the primary use of national forests is for watershed protection and timber production. These two uses it would seem are primary and take precedent over all others.

Nothing will be solved in debate until there is a better understanding and common denominator for the term "multiple use." Does multiple use contemplate all uses on every acre, or does it mean all uses as applied to a "forest" as an entire unit? Do government land descriptions have any affinity with multiple use?

I cannot help but conclude that the AFA and many other professionals mean all uses on every acre, whereas other professionals interpret it to mean the several uses on an entire "forest" basis.

(Turn to page 71)

Use of national forests is a privilege, not a right. While AFA has left the door open for suitable recognition of wilderness by Congress, it sees little difference in the Humphrey Bill and the D'Ewart grazing bill

.. Two Points of View

By JAMES B. CRAIG

ON the opposite page, readers will find a wilderness statement by Mr. Ernest Swift, the director of the National Wildlife Federation. In this statement published originally in the *Conservation News*, the author does not state whether he is actually for or against the Humphrey Wilderness Bill in its present form. Rather, he raises certain questions that he directs to us specifically and to forestry in general in an effort to get all the facts out on the table. We subscribe to this approach and believe Mr. Swift is entitled to some answers.

By way of initial premise, most of us agree that the national forests and parks represent two of the really superb achievements of the American people. Personally, we have always thought that people living on other planets, with the equipment to study us at close range, would very likely point to our forests and parks as two of the most civilized achievements of the United States. And while Mr. Swift insists that we also give the Almighty some credit for having had a hand in the creation of these things, we believe the American people and their professional representatives on these lands deserve a lot of credit too. Unique in human history, these areas as managed by our career specialists stand as monuments to the fact that Americans are not wholly crass and materialistic. In the effort to establish these areas, AFA had some small part.

While we Americans hold our forests and parks in great esteem, we do not always see eye to eye on how they can be managed and preserved most efficiently. In general, we subscribe to the principle that they be managed for the good of the greatest number for the longest time; but many users create many pressures and many of these users are inclined to think that their particular type of use is not getting quite the fair shake it should. To cope with these problems, the American people years ago fielded two of the best professional

career services money could buy. These are the Forest Service of the Department of Agriculture and the National Park Service of the Department of Interior. The parks are managed on the principle that these priceless areas shall be handed over to future generations "unimpaired" and anyone who has ever tried to monkey with that concept has quickly heard from the American people.

Since it started to emerge from its previous custodial status, management of the forests has become a most complex and many-faceted thing. Since the forests deal with a variety of different types of uses as contrasted to the parks, the Executive Branch in its wisdom, gave the Forest Service unusual latitude and administrative elasticity well aware that changing times and conditions sometimes call for revised policies. Management of the forests has to be a fluid sort of thing. Of key importance is the fact that we have never legislated policy in the sense that one particular category of use has been granted special rights. As a result, use on the forests is regarded as a "privilege," not a "right." And while no management program is perfect, administration of these lands, in the main, has been on the basis of what is best in terms of the land itself, and not on what bloc of voters can nail down the most rights.

This management program is carried out by what is generally called "multiple use" and Mr. Swift asks, "What is it?" First of all, it does not mean every type of use going on simultaneously on every acre. As Dr. S. T. Dana comments, "This is an appealing concept; but there are certain biological, physical, and economic facts that prevent its universal application. Seldom on an area of an acre, or of a million acres, is it possible to produce a maximum amount of any two or more goods or services. Managerial practices that will produce the most wood are unlikely to produce the most forage or

wildlife. Certain methods of mining have an adverse effect on recreation and the water supply. What combination of uses is ecologically sound and will yield the largest net returns (both tangible and intangible) is a question that has to be answered for every national forest or other administrative unit on the basis of thorough study of all the pertinent facts."

In short, each forest area presents its own basket full of individual problems. No two valleys or watersheds are quite alike. Which means that if these problems are to be met and solved intelligently in terms of the best interests of the people in given areas and the good of the land itself, a career professional service is a must; and furthermore, it must have the backing of the people it represents. Obviously, its decisions will not please everybody even after impartial hearings and inquiries. But this is certainly preferable to the gradual immobilizing of a service with great public prestige and the creation of a series of little Balkan states representing single use interests that will in turn fall prey to new interests and new uses as time goes on.

As noted, Mr. Swift does not come out flatly for the Wilderness Bill in its present form. What he is getting at, unless we are mistaken, is this: If public servants are to manage these lands, what assurance do we have, in view of the fact that water and timber production are considered paramount, that other values including the more intangible ones, will be adequately provided for?

First of all, on the basis of what we hear and read, we would doubt if there are any final absolutes as regards most important land uses. AFA is going to considerable time and study to probe into some of these very things and what the results will show no one can foresee. In this day and age, can anyone say with any certainty that water and timber pro-

(Turn to page 55)

A TRAIL RIDER TAKES A STAND

By EMANUEL FRITZ

*Professor of Forestry, emeritus
University of California*

THERE was introduced in the U. S. Senate on June 7, 1956, by Senator Hubert Humphrey, for himself and 9 other senators, a bill (S 4013) to be known as the National Wilderness Preservation Act. This bill brings to a head a number of controversies over the boundaries and administration of several wilderness areas.

Purpose of the bill, as expressed in the preamble, is to establish a National Wilderness Preservation System. The Sierra Club describes the bill as providing for "additional safeguards to existing protection of wilderness areas in federal ownership." Others have described it as a measure for the security of existing wilderness areas.

The bill owes its origin to attempts to reduce the boundaries of certain wilderness areas and to introduce commercial recreation features, like ski lifts, into others. It is thus obvious that the intent of the bill is the "freezing" of boundaries and uses by Congressional action.

A number of conservation organizations interested mainly in recreation and sports are favoring the bill. This is to be expected and their motives are good, but their vision is short. Before other types of organizations enter their support, the provisions of the bill and their import should be closely examined. It is the kind of bill that looks good, but may actually do harm to the very objective it is supposed to protect—"the permanent good of the whole people."

No land purchases are contemplated. The bill concerns only lands already in federal ownership and which may already have been set aside as wilderness or wild areas, or which may be so set aside. These are to be administered "in such manner as will leave them unimpaired for future use and enjoyment as wilderness."

The bill wisely recognizes that increases in population and industrialization will wipe out or modify many accessible natural areas. Since the areas to come under the purview of the bill are generally remote, it is regrettable that a start for the preservation of scenic and recreational areas could not have been made closer to population centers where a far greater good could be accomplished.

The bill recognizes a wilderness "as an area where the earth and its community of life are untrammelled by man." Just how this can be achieved is not clear. Granted that very few people will ever visit most of the listed wilderness areas, these few, the people who are supporting the measure, have not been innocent of trammeling nature. Therefore, preservation can be only relative.

The National Wilderness Preservation System, as described, would include wilderness, wild, roadless, and primitive areas already so designated in the national forests; all of the national parks, and wild life refuges except for portions set aside for roads and buildings for visitors. Certain parts of Indian reservations, upon approval of tribal councils, are also included. Except for those already so designated in the national forests all of the other wilderness areas will have to be declared as such. Thus the total wilderness areas would total in excess of 25 million acres, most of it in the Western third of the U. S. It should be repeated that all of this is already federal land, and that the part not already designated for wilderness area administration will be so designated. Additional wilderness areas may be set up in the national forests where there are already 14,000,000 acres so declared, and provision is made for purchases of land *within* any federal unit.

No addition to, modification of, or

elimination from the National Wilderness Preservation System (except for Indian lands) can be made except by reporting such a proposal to Congress and failure of Congress to pass a resolution opposing it. In effect, Congressional approval is required.

No new administrative agency is contemplated. All the wilderness areas frozen into the system by this bill will be administered by the agency already responsible, but that agency is required to preserve their wilderness character.

Subject to existing private rights there is to be no lumbering, prospecting, mining, grazing, water storage or commercial enterprise. Existing private rights are not affected. The wilderness areas are to be left roadless and without airplane landing fields, in fact the "related airspace" is reserved. Provision is made for grazing pack animals of recreationists, but saddle stock is not mentioned.

To protect the interest of proponents of wilderness areas, the bill provides for a National Wilderness Preservation Council consisting ex-officio of two senators, two representatives, four bureau chiefs, and the secretary of the Smithsonian Institution, plus "six citizen members known to be informed regarding, and interested in the preservation of wilderness—." The Smithsonian man would serve as secretary of the council.

This council is likely to become a powerful agency, and its six citizen members will most certainly represent pressure groups. It is my guess the council will prove to be a headache for the bureau chiefs concerned.

The council would be the repository for maps and official papers pertaining to the system. It would be empowered to make surveys of wilderness needs, make maps, disseminate information. It can solicit aid from the President, secretaries and other appropriate federal officers, and it would be required to prepare an annual report. Its members would serve without pay. It would report to Congress any proposal to change boundaries, and such changes would become effective only if Congress does not oppose them.

I have described the bill and made a few comments as I did so. I should like now to give you my opinion on the bill.

Frankly, in spite of the fact that I can be labeled a wilderness enthusiast, I don't think this bill should be passed.

(Turn to page 58)

National Wilderness Preservation Act

(From page 39)

Park and Zion National Monument, Utah.

Additional units of the National Park System may be designated for inclusion in the System by Act of Congress or by Executive order or proclamation of the President. No unit of the National Park System shall be removed from the System except by Act of Congress.

Ninety days after giving public notice in accordance with section 4 of the Administrative Procedure Act of 1946 (60 Stat. 238, U.S.C. 5:1003) the Secretary of the Interior shall designate within each unit of the National Park System named for inclusion in the System such area or areas as he shall determine to be required for roads, motor trails, buildings, accommodations for visitors and administrative installations. A notice of each such designation together with a map and description of the affected area or areas shall be forwarded to the secretary of the National Wilderness Preservation Council established hereunder. Each such unit of the National Park System shall become part of the National Wilderness Preservation System when this designation has been made. Designations shall be made not later than January 1, 1966, or within 2 years after the unit has been added to the System, whichever is later. Should the Secretary fail to make such a designation for any such unit of the National Park System within the time limit specified, that unit shall automatically then become a part of the System.

No designation of an area for roads, motor trails, buildings, accommodations for visitors, or administrative installations shall modify or affect the application to that area of the provisions of the Act approved August 25, 1916, entitled "An Act to establish a National Park Service, and for other purposes." (39 Stat. 535, as amended; U.S.C. 16:1 *et seq.*) The accommodations and installations in such designated areas shall be incident to the conservation and use and enjoyment of the scenery and the natural and historic objects and flora and fauna of the park or monument in its natural condition.

National Wildlife Refuges and Ranges

(c) The System shall include the following national wildlife refuges and ranges: Aleutian Islands National Wildlife Refuge, Alaska; Aransas National Wildlife Refuge, Tex.; Bogoslof National Wildlife Refuge, Alaska; Cabeza Prieta Game Range, Ariz.; Cape Romain National Wildlife Refuge, S.C.; Charles Sheldon Antelope Range, Nev.; Delta National Wildlife Refuge, La.; Desert Game Range, Nev.; Fort Peck Game Range, Mont.; Kenai National Moose

Range, Alaska; Kodiak National Wildlife Refuge, Alaska; Kofa Game Range, Ariz.; Moosehorn National Wildlife Refuge, Maine; National Bison Range, Mont.; Nunivak National Wildlife Refuge, Alaska; Okefenokee National Wildlife Refuge, Ga.; Red Rock Lakes Migratory Waterfowl Refuge, Mont.; Seney National Wildlife Refuge, Mich.; Sheldon National Antelope Refuge, Nev.; Wichita Mountains National Wildlife Refuge, Okla.

Additional national wildlife refuges and ranges may be designated by the Secretary of the Interior for inclusion in the System. Such designations shall be reported, with maps and descriptions, to the secretary of the National Wilderness Preservation Council established hereunder. No wildlife refuge or range shall be removed from the System except by Act of Congress.

Ninety days after giving public notice in accordance with section 4, Administrative Procedure Act of 1946 (60 Stat. 238, U.S.C. 5:1003) the Secretary of the Interior shall designate within each national wildlife refuge and range named for inclusion in the System such area or areas as he shall determine to be required for roads and buildings and other installations for administration and protection of the refuge or range for wildlife. A notice of each such designation together with a map and description of the affected area or areas shall be forwarded to the secretary of the National Wilderness Preservation Council established hereunder. Each national wildlife refuge and range named for inclusion shall become part of the National Wilderness Preservation System when this designation has been so made for that national wildlife refuge or range. Designations shall be made not later than January 1, 1966, or within 2 years after a refuge or range has been added to the System, whichever is later. Should the Secretary fail to make such a designation for any such national wildlife refuge or range within the time limits specified, that refuge or range shall automatically then become a part of the System.

The Indians' Wilderness

(d) The System shall include the following roadless areas and wild areas on Indian reservations and such additional roadless and wild areas on Indian reservations as the Secretary of the Interior may designate, but no such area shall be included until the tribe or band within whose reservation it lies, through its tribal council or other duly constituted authority, shall have given its consent to the inclusion of the area within the Sys-

tem: Black Mesa Roadless Area, Navaho Indian Reservation, Ariz.; Black River Roadless Area, Fort Apache and San Carlos Indian Reservations, Ariz.; Columbia-San Poil Divide Roadless Area, Colville Indian Reservation, Wash.; Fort Charlotte Wild Area, Grand Portage Indian Reservation, Minn.; Goat Rocks Roadless Area, Yakima Indian Reservation, Wash.; Grand Canyon Roadless Area, Hualapai Indian Reservation, Ariz.; Grand Portage Wild Area, Grand Portage Indian Reservation, Minn.; Mesa Verde Roadless Area, Consolidated Ute Indian Reservation, Colo.; Mount Adams Wild Area, Yakima Indian Reservation, Wash.; Mount Jefferson Roadless Area, Warm Springs Indian Reservation, Oreg.; Mount Thomas Roadless Area, Fort Apache Indian Reservation, Ariz.; Mission Range Roadless Area, Flathead Indian Reservation, Mont.; Painted Desert Roadless Area, Navaho Indian Reservation, Ariz.; Rainbow Bridge Roadless Area, Navaho Indian Reservation, Ariz.; Wind River Mountains Roadless Area, Shoshone Indian Reservation, Wyo.

Any proposed addition, modification, or elimination of roadless and wild areas on Indian reservations shall be in accordance with such regulations as the Secretary of the Interior shall establish in conformity with the purposes of this act subject to the consent of the several tribes or bands, through their tribal councils or other duly constituted authorities, each with regard to the area or areas within its jurisdiction. Any addition, modification, or elimination shall be reported, with map and description, to the secretary of the National Wilderness Preservation Council. Nothing in this Act shall in any respect abrogate any treaty with any band or tribe of Indians, or in any way modify or otherwise affect existing hunting and fishing rights or privileges.

Other Units

The System shall also include such units as may be designated within any federally owned or controlled land and/or water by the official or officials authorized to determine the use of the lands and waters involved. Addition to or modification or elimination of such units shall be in accordance with regulations that shall be established in conformity with the purposes of this Act by the official or officials authorized to determine the use of the lands and waters involved, and said official or officials shall forward a notice of such addition, modification, or elimination to the secretary of the National Wilderness Preservation Council.

(f) Any proposed addition to, modification of, or elimination from the National Wilderness Preservation System otherwise than by Act of Congress, except on Indian reservations, shall be reported to Congress by the secretary of the National Wilderness Preservation Council upon receipt of notice and shall take effect upon the expiration of the first period of 120 calendar days, of continuous session of Congress, following the date on which the report is received by Congress; but only if during this period there has not been passed by either House of Congress a resolution opposing such proposed addition, modification, or elimination. Within any Federally owned unit within the National Wilderness Preservation System the acquisition of any privately owned lands is hereby authorized and such sums as Congress may decide are hereby authorized to be appropriated for such acquisition out of any money in the Treasury not otherwise appropriated.

Use of the Wilderness

SEC. 3. (a) Nothing in this act shall be interpreted as interfering with the purpose stated in the establishment of any national park or monument, national forest, national wildlife refuge, Indian reservation, or other Federal land area involved, except that any agency administering any area within the National Wilderness Preservation System shall be responsible for preserving the wilderness character of the area. The National Wilderness Preservation System shall be devoted to the public purposes of recreational, educational, scenic, scientific, conservation, and historical uses. All such use shall be in harmony, both in kind and degree, with the wilderness environment and with its preservation.

The administration of wilderness, wild, and roadless areas in the national forests as units of the System shall be in accordance with such regulations as the Secretary of Agriculture shall establish in conformity with the purposes of this Act. The administration of the included national parks, national monuments, wildlife refuges and ranges as units of the System shall be in accordance with such regulations as the Secretary of the Interior shall establish in conformity with the purposes of this Act. The administration of roadless and wild areas within Indian reservations included in the System shall be in accordance with such regulations as the Secretary of the Interior shall establish in conformity with the purposes of this Act subject to the consent of the several tribes or bands, through their tribal councils or other duly constituted authorities, each with regard to the area or areas within its jurisdiction. The administration of any other area added to the System and not otherwise provided for in this sec-

tion shall be in accordance with such regulations as shall be established by the official or officials authorized to determine the use of the lands and waters involved. Copies of the regulations established for such administration of any unit or units of the System and copies of any subsequent amendments shall be forwarded, by the Secretary of Agriculture, the Secretary of the Interior, or such other official or officials as shall establish such regulations, to the secretary of the National Wilderness Preservation Council. The Council shall maintain a file of such regulations but shall have no administrative jurisdiction over any unit in the System nor over any agency that does have such jurisdiction.

(b) Except as otherwise provided in this section, and subject to existing private rights (if any), no portion of any area constituting a unit of the National

AFA Elects Directors

The membership of The American Forestry Association elected James C. Worthy, Albert G. Ernest, Edward P. Stamm, James J. Storrow, and George W. Merck to three-year terms on the board of directors. Stanley G. Fontanna was elected to a one-year term.

During the election votes were also cast for Arthur H. Carhart, L. H. Dunten, Albert G. Hall, Olaus J. Murie, X. L. Pellicer and Joseph W. Penfold.

Wilderness Preservation System shall be devoted to commodity production, to lumbering, prospecting, mining, or the removal of mineral deposits (including oil and gas), grazing by domestic livestock (other than by animals in connection with the administration or recreational, educational, or scientific use of the wilderness), water diversions, water management practices involving manipulation of the plant cover, water impoundment or reservoir storage, or to any form of commercial enterprise except as contemplated by the purposes of this Act. Within such areas, except as otherwise provided in this section and in section 2 of this Act, there shall be no road, nor any use of motor vehicles, or motorboats, or landing of aircraft, nor any other mechanical transport, or delivery of persons or supplies, nor any structure or installation in excess of the minimum required for the administration of the area for the purposes of this Act.

Special Provisions

(c) The following special provisions are hereby made:

(1) Roads over national forest lands included in this System reserved from the public domain and necessary for ingress and egress to or from privately owned property shall be, and roads over national forest lands otherwise acquired may be, allowed under appropriate conditions determined by the forest supervisor.

(2) Within national forest areas included in this System, grazing of domestic livestock and the use of airplanes or motorboats where these practices have already become well established may be permitted to continue subject to such restrictions as the Chief of the Forest Service deems desirable. Such practices shall be recognized as nonconforming use of the area of wilderness involved and shall be terminated whenever this can be effected with equity to, or in agreement with, those making such use.

(3) Nothing in this Act shall modify the restrictions and provisions of the Shipstead-Nolan Act, Public Law 539, 71st Congress, 2d Session, July 10, 1930, and the Humphrey-Thye-Blatnik-Andersen Act, Public Law 607, 84th Congress, 2d Session, June 22, 1956, as applying to the Superior National Forest or the regulations of the Secretary of Agriculture.

(4) Any existing use authorized or provided for in the Executive order or legislation establishing any national wildlife refuge or range may be continued in accordance with permit granted under such authorization or provision, but any nonconforming use of the areas of wilderness involved shall be terminated whenever this can be effected with equity to, or in agreement with those making such use.

A National Wilderness Preservation Council

SEC. 4. (a) A National Wilderness Preservation Council is hereby created to consist ex officio of the persons at the time designated as the chairman and the ranking minority member of the Committee on Interior and Insular Affairs of the Senate, the chairman and the ranking minority member of the Committee on Interior and Insular Affairs of the House of Representatives, the Chief of the United States Forest Service, the Director of the National Park Service, the Director of the Fish and Wildlife Service, the Commissioner of Indian Affairs, the Secretary of the Smithsonian Institution, and also six citizen members known to be informed regarding, and interested in the preservation of, wilderness, 2 of whom shall be named initially for terms of 2 years, 2 for terms of 4 years, and 2 for terms of 6 years, by the

President. After the expiration of these initial terms, each citizen member shall be appointed for a 6-year term. When initial or subsequent appointments are to be made to this Council any established national organization interested in wilderness preservation may make recommendations to the President regarding candidates any of whom would be deemed suitable for appointment to the Council. The President shall designate from among its members a chairman who shall serve for a 2-year term. The Secretary of the Smithsonian Institution shall be the secretary of the Council and, subject to the Council, shall maintain its headquarters.

(b) The Council shall serve as the repository for, and shall maintain available for public inspection, such maps and official papers regarding the National Wilderness Preservation System as may be filed with it. Upon receipt of a report of a proposed addition, modification, or elimination of an area as required under section 2 of this Act, the secretary of the Council shall report within ten days such proposed action to the Senate and to the House of Representatives. The Council shall serve as a nonexclusive clearinghouse for exchange of information among the agencies administering areas within the System. The Council shall

make, sponsor, and coordinate surveys of wilderness needs and conditions and gather and disseminate information, including maps, for the information of the public regarding use and preservation of the areas of wilderness within the System, including information and maps regarding State and other non-Federal areas which the Council shall consider important to wilderness preservation. The Council is directed to consult with, advise, and invoke the aid of the President, the Secretaries of Interior and Agriculture, and other appropriate officers of the United States Government and to assist in obtaining cooperation in wilderness preservation and use among Federal and State agencies and private agencies and organizations concerned therewith. The Council, through its chairman, shall annually present to Congress, not later than the first Monday in December, a report on the operations of the Council during the preceding fiscal year and on the status of the National Wilderness Preservation System at the close of that fiscal year, including an annotated list of the areas in the System showing their size, location, and administering agency, and shall make such recommendations to Congress as the Council shall deem advisable.

(c) The Council shall meet annually and at such times between annual meetings as the Council shall determine, or upon call of the chairman or any three members. Members of the Council shall serve as such without compensation but shall receive transportation expenses and in addition a per diem payment to be fixed by the Council, not to exceed \$25 a day, as reimbursement for expenditures in connection with attending any meeting of the Council. A sum sufficient to pay the necessary clerical and administrative expenses of the Council and its members, not to exceed an annual expenditure of \$50,000, and such additional sums as the Congress may decide for carrying out the purposes of the Council, including printing, are hereby authorized to be appropriated out of any money in the Treasury not otherwise appropriated. The Council is authorized to accept private gifts and benefactions to be used to further the purposes of this Act, and such gifts and benefactions shall be deductible from income for Federal tax purposes and shall be exempt from Federal estate tax.

SEC. 5. This Act shall be known by the short title "National Wilderness Preservation Act."

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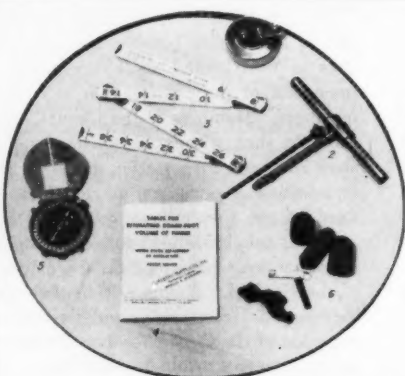
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Forest Service and Recreation

(From page 29)

"Well, it could do something to keep out the hoodlum element—."

"But the national forests are public lands. You can't keep people out of the public domain, can you?"

"We don't let hoodlums into our public libraries, our churches, our museums—."

"That's right. Why can't the Forest Service sieve out those who just want to destroy and mess up everything?"

"Tell me—how can they do that?" put in one rather skeptically.

"Well, for one thing it's just too easy to get campfire permits. Make it harder!"

"Why not make a charge for the use of campgrounds?"

"The rangers would find it something of a job to go around collecting fees, I'm afraid."

The matter of fees was batted around for quite some time. Then someone changed the subject.

"You know, you hardly ever see a forest ranger in the back country any more."

"That's certainly true. They patrol only the roads nowadays."

"Yes, and the hoodlums know it."

Every one present was high in praise of modern staff work in fighting the national forest fires of today. District rangers, superintendents, and patrolmen were mentioned, individually and as a whole, with commendation and admiration.

One of the older men in the group summed it up for all of them when he said, "I don't believe there's any department of the government that has in it so many men so truly devoted to the public interest as the Forest Service has."

"But why aren't more of them interested in the recreational end of it?"

"Let's forget for a while the questions for which there seem to be no answers and try to figure out something we can do about all this."

The chief result of the afternoon's meeting was a decision to mail out a conservation questionnaire to the several hundred alumni who could not attend this particular reunion.

During the weeks that followed some three hundred copies of the proposed questionnaire were mailed out—and most of them were returned promptly with specific replies and with added comments. The men to whom they were sent comprise a better-than-average cross-section of

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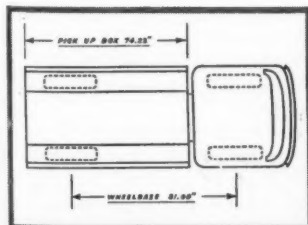
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young American citizens who make constant use of the recreational facilities of the national forests. Actors, carpenters, artists, policemen, doctors, business men, firemen, lawyers, teachers, mechanics—men in all walks of life are represented in the group—there are even some Forest Service men among them!

None of the questions was answered by every individual queried, but for what they are worth here is the gist of the replies:

Fifty-two percent felt that an annual charge should be made even for picnic permits, but thirty-two percent felt that no charge whatever should be made for this use. However, eighty-four percent were in favor of an annual charge for camping permits, with only thirteen percent opposed to this idea. Eighty-four percent thought that every recreational group should be required to secure a permit and to pay a fee, and only nine percent were in opposition.

Seventy-five percent were in accord that some sort of restrictions should be put upon fishing in very small lakes in national forests easily accessible from large centers of population. Of this percentage seventeen percent were against all fishing in such lakes, thirty-nine percent voted to limit the fishing to the use of artificial lures, fifteen percent approved limiting the fishing to children, and four percent thought only old-age pensioners should have a go at it!

Eighty-one percent cast their vote in favor of having the national forests of southern California set aside as wildlife sanctuaries. Twelve percent opposed this, but of this twelve percent many qualified their reply by noting that they were in accord with the idea so far as some of the forests were concerned. One questioned, for instance, whether there were not areas in the Los Padres where hunting might still be safe.

Ninety-two percent indicated that Forest Service personnel should actively and whole-heartedly reassume the functions of law-enforcement officers in the national forests. A bare two percent said no to this.

Ninety-three percent favored more adequate patrol of the back country of the national forests. A meager four percent dissented.

In the letters that came with the questionnaires many suggestions were made with regard to fees and permits. In general it was proposed that fees should be paid and permits issued only at the offices of forest

supervisors and district rangers and upon the signing of a strict pledge of outdoor good manners. It was the consensus of opinion that requiring every recreational group to secure a permit might effectively screen out a large percentage of hoodlum teen-age groups, particularly if such a permit were issued only when responsible adult leadership signed acceptance of responsibility for the conduct of the group.

A great number of the letters pertained to fishing. It was easy to see that the majority of the writers were simon-pure fly-fishermen. One man recommended that only lures with one hook should be allowed and that the barb on that hook should be filed off! Many advocated that even the streams in mountain areas subject to a heavy recreation load should be restricted to the use of artificial lures.

The majority of those who commented on the question of setting aside the national forests of southern California as wildlife sanctuaries stated, in one form or another, that what wildlife still remains in these areas is of greater economic value for the aesthetic satisfaction it affords the majority of recreational users than for the pleasure it gives to the minority group of hunters.

In defense of the idea that Forest Service personnel should reassume the functions of general law-enforcement officers in the national forests, several men pointed out that, generally speaking, men of the sheriff's office in any particular area are likely to be so unfamiliar with mountain territory that Forest Service men usually have to accompany them anyway in the event of trouble. One writer recommended that it might well be possible to work out some cooperative plan between the Forest Service and sheriff's offices whereby the counties would make it financially possible for the Forest Service to hire more men for patrol purposes.

Letter after letter told of contacts with Forest Service men who had expressed considerable resentment that they had to give time and consideration to the recreational users of the forests. Apparently many of these men had been far from hesitant in giving voice to their feeling that policing campgrounds, dumping garbage pails, and cleaning toilets were far from suitable jobs for a college-educated forester!

Four men who had taken courses at two of our leading forestry schools wrote that they had never heard recreation mentioned in their course

except in tones of contempt. One of these four men sent a marked copy of the speech made on March 28, 1956, at a supervisors' meeting in Portland, Oregon, by Dean W. F. McCulloch of the School of Forestry of Oregon State College. The marked passage reads:

"... one situation which resource managers will find increasingly difficult to tolerate is the ascendancy of the urban bird-watchers, the daffodil wing of nature-lovers. These often well-meaning town folk are self-styled experts in all phases of resource use, having rarely spent so much as a single day in actual resource operation. The theory is that if you shout loud enough you don't need to know anything about the subject. So the conservation-shouters are now loud in the land..."

Evidently Dean McCulloch's speech was widely circulated among the membership of outdoor clubs of the West for more and more letters expressed resentment of it.

Happily, the writer, after more than forty years of camping and hiking in the national forests of the West, can attest that there are many men in the Forest Service who would take equal exception to Dean McCulloch's scornful indictment of the recreational users of the forests. These men are just as interested as our young men of the reunion group in preserving our outdoor heritage, for they know better than most its immeasurable value for the basic recreational activities that are becoming more and more essential with the stresses and strains of modern urban living.

Recreation and national forests are almost synonymous. Bernard Frank of the Division of Forest Influences of the Forest Service is responsible for the statement that "Cultural necessity is fast imposing recreation as a major objective of forest land management."

The young men so often quoted in this article know this. The most thoughtful members of the various outdoor organizations know it. But all know, too, that man as well as nature must be kept in balance, that true recreation is possible only when the recreationist recognizes his responsibility to his fellow man as well as to nature.

To devise and maintain a policy and program of recreation that will safeguard what is left of our national forest inheritance is no mean task. In its fulfillment, the Forest Service might well listen to some of us "conservation shouters!"

Forest Management vs. Recreation Management

(From page 33)

It would be folly to contend that the South Dakota plan is entirely palatable to the extremist viewpoint, which would make it a sacrilege to carry an ax in a public park. Likewise, this plan is not entirely agreeable to the "produce-wood-only" forester, who would extract every cubic inch of wood without regard to the other values of the forest. Further, this plan may not be entirely practical in all areas and in all forest types, but it is working to the greatest public benefit in the ponderosa pine of Custer State Park in the Black Hills of South Dakota.

In order to develop this story, a brief history of the area will help the reader understand the program. Custer State Park is located in the southern and eastern edge of the Black Hills of South Dakota. In the park there are about 16,000 acres of grassland, and 53,000 acres timbered principally with ponderosa pine, which occurs in pure stands except along the stream courses where it is mixed with paper birch, quaking aspen, American elm, burr oak, green ash, and the Black Hills spruce—the State Tree.

Custer State Forest was originally established in 1912 through land exchanges between the South Dakota Department of School and Public Lands and the federal government, in which sections 16 and 36 were exchanged for one solid block. In 1913 the state forest was made a game preserve and placed under the joint supervision of the Commissioner of School and Public Lands and the State Game Warden. About this time elk and buffalo herds were introduced and the area began to have recreational appeal. In 1919 the area was redesignated as Custer State Park and a separate Park Board was established to administer the area and initiate a purchase plan to buy the land from the Commissioner of School and Public Lands. In the meantime, about 1917, the commissioner started selling timber, and narrow gauge railroads were built to haul logs out of the park. By 1927, 45 million board feet had been sold in the park and harvested with little or no regard to sustaining yields. In fact, the heavy cutting aroused public sentiment to the extent that the legislature limited the annual cut to 100,000 board feet per year, a figure so restrictive that no manage-

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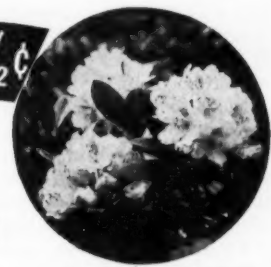
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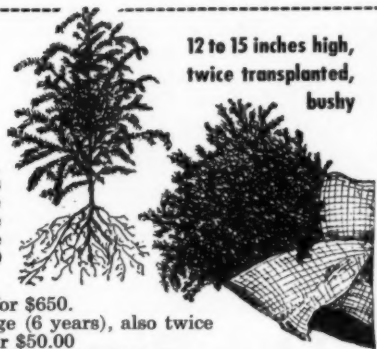
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ment could be considered. The Park Board did institute a program of acquisition and purchased approximately two-thirds of the park, leaving 23,000 acres in the hands of the commissioner. No further purchases have been consummated to this date, and the checkerboard ownership in itself creates obvious problems of administration and management.

From 1927 to 1945, practically no forestry was practiced in the park except for the fire control and insect (Black Hills beetle) control activities carried on with C.C.C. personnel. Stagnation of the old overmature stands was much in evidence, and annual losses from disease and insects were high. Then in 1945, the legislature abolished the Park Board and established the Game, Fish and Parks Commission, giving it over-all supervision over game, fish and parks and forestry matters. The Division of Forestry, headed by a State Forester, was simultaneously created to have supervision over the park and forestry activities of both the Game, Fish and Parks Commission and the Commissioner of School and Public Lands. (The State Forester is employed by the Game, Fish and Parks

Commission with the approval of the Commissioner of School and Public Lands.) In 1946, the Division of Forestry immediately began to investigate the forestry problems in the park and reported to the 1947 legislature. This legislature directed that the timber in Custer State Park should be harvested upon a sustained-yield basis with a maximum annual harvest of six million board feet. Some opposition to the bill was voiced in committee hearings, but the measure passed both houses without a dissenting vote.

Soon after the 1947 law was passed, the Division of Forestry set about to conduct surveys and make plans for harvest. Logging units were laid out on natural drainages and property lines were carefully laid out so that school timber and park timber could be sold separately. Considerable study and research was done to determine what policies and practices would fit into this recreational area which is being visited by a million people each year.

Finally, a management plan was produced which reserved as "natural area" roadside strips and scenic areas around Sylvan Lake and the Needles;

Stockade, Legion and Center lakes; and the French Creek gorge, all consisting of a little over 12,000 acres of grassland and timberland. This may be more reservation than is actually necessary, but most of the reserved acreage is in unique scenic areas. While no management is planned in the natural areas at this time, it is obvious that fire control and insect control must be enforced to protect the remainder of the forest. Many persons have already urged utilization of the old overmature trees in the natural areas before they succumb to natural causes and become lightning attractors.

Under this management plan a harvest will be conducted on each unit every twenty years, at which time the cut will be approximately equal to the growth during the preceding twenty years. In this way the growing stock will not be reduced even in the initial stage of the harvest, which contemplates removing about 40 percent of the volume on the unit. Actual harvest operations didn't get started until 1948, but by July, 1956, the cut totaled 24 million board feet for an average of nearly 3 million board feet per year. Area-

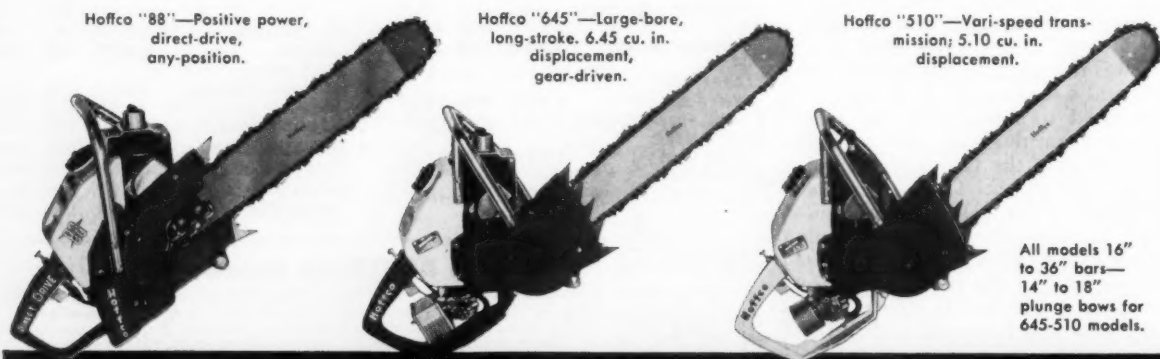
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wise, less than half of the park remains to be cutover during the remaining twelve years in the first cutting cycle.

A very strict set of logging regulations has been adopted, which at first were probably distasteful to logging operators, but they have gradually become accustomed to our methods and have taken great pride in the exactness and cleanliness of their work. All logging roads are constructed with a view towards permanency for fire protection and administration. Along roads and in draw bottoms, it is required that slash be piled and burned. On slopes and ridges, the slash must be lopped and scattered to prevent erosion and to build up the soil. To prevent damage to young trees and to reduce erosion, no skidding is permitted except with horses. All dead snags must be felled, thus reducing the incidence of lightning fires. During high fire danger or soft ground conditions, no hauling is permitted.

No sawmills are permitted to operate in the park, but there are adequate operating mills in close proximity to the park.

As a result of our experience in this field, several observations have been made that may be of interest to others with similar circumstances:

1. That intelligent zoning (which includes mainly the reservation of natural areas) of all public forest and park lands, wherein that portion actually necessary for recreation is reserved from intensive management and wherein all other lands are released for management, will solve many of the administrator's problems where recreation is an important function of the forest area in question. Others have made some similar observations.¹
2. That the best method of preserving the forest is through well-executed, sustained-yield management supported by a strong protection system (protection from fire, insects and disease).
3. That available grass and browse for wildlife or domestic livestock will be materially increased by a management program.
4. That if we fail to harvest the annual increment from the forests, fire, insects and disease will take their toll without benefiting anyone.
5. That logging practices in recreation areas should be conservative, if not exemplary.

6. That forest recreation offers one of the finest mediums for selling good forestry practices to the general public. This principle has been recognized by some of the major forest industries.

In conclusion, it is recommended to foresters and administrators, both public and private, that they analyse the basic purposes of their forest land operation in light of the increasing recreational needs and in the light of the need for greater public education on the principles of

good forest management. Mr. Citizen can be found in a most receptive mood if he is enjoying a pleasant vacation in some natural beauty spot in the forest. He would enjoy "show-me" trips through logging operations and cutover areas. He will then be better able to recognize and appreciate the values of forestry.

1. Chapman, H. H., "Recreational Interest as Affecting Professional Forestry Activities," *Journal of Forestry*, April 1948, pp. 290-293; and Points of View, *Journal of Forestry*, September 1951, pp. 657. Wagar, J. V. K., "Some Major Principles in Recreation and Use Planning," *Journal of Forestry*, June 1951, pp. 431-435; and Points of View, *Journal of Forestry*, November 1951, pp. 797.



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Forester's Notebook

(From page 35)

long as it is rooted to the same depth. For example, in a layer of soil three feet deep it would make little difference regarding the total water loss whether this soil is covered with alfalfa, peach trees, oak trees, or pine trees. This would not be true in a very deep soil in which different species are rooted to different depths.

Tennesseans spent \$60.2 million on the sports of fishing and hunting in 1955 according to Sport Fishing Institute. This compares favorably with the \$68 million paid the state farmers for dairy products, the \$64 million for purchase of cattle or the \$63 million for tobacco-leaf during the same period.

In an effort to improve bass fishing on the Flint River near Flint, Michigan, Buick built a treatment plant capable of handling all the wastes from a production of 1,000,000 cars annually. It is said to be the present-day ultimate in pollution abatement, with fish reportedly able to live for considerable periods in the treated water just as it comes from the plant.

A fire cause analysis is being conducted in the four counties surrounding Chattanooga by TVA and the Conservation Commissions of Georgia and Tennessee. A special "flying squad," whose sole responsibility is to find out how the fire started, will go immediately to every reported fire. Other protection crews usually try to bring the fire under control first and then try to determine the cause. Often-times the evidence is consumed. Consequently fire statistics, used in planning prevention campaigns, may be in error as to exact causes.

Checks totaling \$28,035,256.40 were mailed to the 40 states and 2 territories containing national forest lands as their share of fiscal year 1956 receipts from those forests. These checks represent 25 percent of the total money collected by the Forest Service for timber sales, grazing permits, and other land use, and is a 45 percent increase over the income of the previous year.

Renewed interest in eastern white pine has resulted in organization of a White Pine Improvement Committee with Victor Jensen, chairman. Mr. Jensen, who also is in charge of the North-eastern Forest Experiment Station's research center at Laconia,

New Hampshire, says that Robert W. Wilson, Jr., currently working toward a Ph.D. at Yale University, has already compiled some 3500 references to white pine.

Privately owned agricultural lands produce 80 percent of the American game crop. But each year the nation is deprived of half a million acres of these lands by erosion and mismanagement. In addition, highways, airports, urban and industrial expansion annually take another enormous bite from the basic resource. Consequently, good management and long-range planning become increasingly important.

Timber from the "back forty" can save a farmer two-thirds of his farm building costs, according to Parker Anderson, forestry specialist at the University of Minnesota. By doing his own logging and having the lumber custom sawed locally for about \$18 per thousand board feet, the farmer can save a good portion of the total cost.

A note of warning has been sounded to people who plan to take advantage of the Soil Bank program for Christmas tree production by M. C. Stewart, president of the National Christmas Tree Growers Association. He points out that plantations must remain in the program at least ten years, consequently many trees will become too big for the Christmas tree market before they can be harvested. Therefore, nursery seedlings should be limited to the species native to the area in which they are to be planted. Otherwise, much of the labor and cost of planting may be wasted as few exotic species become merchantable for the pulpwood or lumber industries. In effect Mr. Stewart is saying that while Douglasfir is fine in the Northwest, don't plant it in Pennsylvania with the expectation of harvesting it for pulpwood if it becomes too big for Christmas trees.

Prescribed burning, a proven technique in Southern pine forests to reduce fire losses, is being tested in California ponderosa pine forests by Dr. Harold H. Biswell, and Arnold M. Schultz, University of California. Promising results have been obtained, but the authors warn that prescribed burning can be dangerous for inexperienced people.

Wilderness Issue

(From page 43)

duction will always represent the maximum use on the forests in days to come and not risk being labeled a boob 50 years hence? The paramount importance of water today would appear to be an unimpeachable fact and yet, use of salt water for domestic use on an economical basis could depend or alter that belief very quickly. Timber today pays the bills on the forests and doubtless will for many years to come. Wood today provides some 6,000 products of one type or another for man's use and only last month, use of an alkaloid from ginkgo tree fruit to help retard growth of cancer cells was being explored. Many, many more new uses of forest products will be developed in years to come in a field that is still scarcely tapped. Yet, we for one would hesitate to say that production of timber on national forests will represent a maximum use for all time to come. When we come right down to it, in an age when domestic use of atomic energy has scarcely been explored, who can be sure?

Today, however, and in the immediate future we rightfully regard water and timber production on national forests as the top priority uses. The point that Mr. Swift seems to be making is not that these are the top two but that some of the other uses on the lower plateaus, notably recreational, wildlife and wilderness are not merely lower down on the priority echelon—but way down.

Let's examine that, but first let us reply to Mr. Swift's question as to whether AFA is not only against the Wilderness Bill but is also against wilderness in the abstract. Well, we are certainly against the Wilderness Bill in its present form. This is a single use bill and is just as bad in its way as was the single use D'Ewart grazing bill of several sessions ago which AFA also opposed. We are at a loss to understand the fear Mr. Swift seems to be expressing regarding the dangers of "rule by man instead of by law" as regards Forest Service administration. Man—or the public—has the final say on all public policy in the final analysis regardless of whether these policies are legislated by Congress or administered by the Executive Branch. If we don't like either one or both, we kick them out and put in a new team. Personally AFA likes the management by Executive Branch approach

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to national forests because the career agency can move more rapidly and efficiently under this type of setup. In this particular bill, we are also opposed to the idea of setting up a special wilderness preserve committee that represents a potential bottleneck in the matter of either wilderness additions or eliminations no matter what their intrinsic merit might be. In short, it is the mechanics of this proposition that looks cumbersome, ineffective and injudicious to the best interests of land management to us, but on the other hand, AFA is all for wilderness and always has been as the record shows. The AFA had a hand in encouraging the establishment of the wilderness areas. In 23 years it has introduced more than 3,000 Americans to wilderness through its Trail Riders. As to whether we are for wilderness in the abstract, nothing more should be required than the statement that AFA has deliberately held down the size of these non-profit expeditions, despite urging to the contrary, because of its belief that too many people charging into too many areas would defeat the purpose of the program. Thus the unquestioned therapeutic values of the trips have been maintained on a high level and in

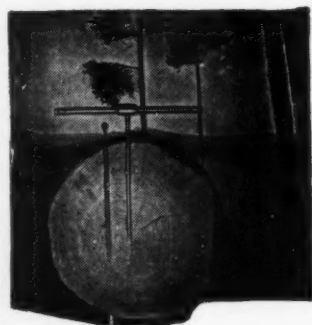
conformity with the views of leading spokesmen for the wilderness concept.

Alright, so we have helped to establish 14 million acres of wilderness on national forests and kept wilderness principles in mind on our Trail Rider trips. How, asks Mr. Swift, do we know foresters won't permit these areas to be sold down the river to the lumbermen when the time comes? Our answer to this is that even if AFA's Board ever sanctioned any such wholesale proposal, which it would not, the time is past in our land history when any one group could resort to such outright single use activity—with the possible exception of our recreationist group unless it has the self discipline to preserve a good thing when they've got it.

Have wilderness interests actually been shabbily treated on the national forests? Well, 14 million acres were set up as wilderness, wild and primitive areas largely on the urgency of a group that represents less than one-half of one percent of the entire recreational public. That there have been and will continue to be certain boundary adjustments in these areas as in others is admitted and will continue to be necessary if the whole public is to be served and not just one or two segments of it.

Actually, it is not wilderness that has great need today other than perhaps some form of proper Congressional recognition that would not be inimical to the management pattern, but recreation itself, meaning the people who hunt, fish, camp, picnic, ride and paddle—people who seldom have been in an actual wilderness area, if ever. Here, it might be argued with some effectiveness that forestry has sometimes been dilatory when it ought to have been militant. Until two years ago, an internal disagreement as to whether earmarked funds were proper or otherwise to serve recreational needs hindered the association's impact. Once it had overcome this problem and agreed to go after direct appropriations it helped to achieve modest but still solid gains. This year, unless all the signs are wrong, will prove to be a different story. National forests recreation this year will probably achieve one of the most sensational advances in history. As to whether a similar advance is in the works for wildlife development, appears to be somewhat less certain. But here again AFA hopes to do its best.

One thing is certain. The clamor for greater recreational development on national forests today has reached



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a peak of intensity unmatched in previous times. One authority, a former chief of the Forest Service, has even said that recreation today must be regarded as second to nothing on the forests. Many foresters are not prepared to go quite that far and perhaps this quotation was inspired in part by a desire to get more foresters to think along recreational lines. But certainly there is great need for recreational and wildlife development on the forests and in most cases both could be achieved with very little if any strain on water and timber production.

In the past, foresters have proven that they have the ability to adjust to new needs and put first things first. There is now some indication that some foresters must readjust their sites in relation to recreation needs. We are led to believe by some people inside the service itself that there is room for improvement on this score. In short, as land managers we've all got to recognize that people must be conserved as well as trees, grass and water.

Dr. Olaus Murie, of the Wilderness Society, in a letter to AMERICAN FORESTS, recently said, "We are dealing here with a social problem." We can all agree with that without supporting the Wilderness Bill that prompted the statement. Here, in our judgment, is a case of the right objectives but the wrong approach. In religion, for example, St. Francis of Assisi made many new and valuable contributions to what is sometimes called nature-mysticism; but he did not risk upsetting the whole ecclesiastical apperception to do it.

Someone, we think it was Dr. Paul B. Sears, of Yale, recently wrote that in the final analysis we all have to come to terms with the land. As regards the national forests, we believe the career Forest Service represents the best machinery whereby we can accomplish that task most efficiently.

Finally, in any consideration of the single use approach, our thoughts invariably go back to the ranger on the land. One of the highlights of every Trail Ride Trip is the campfire at which the ranger or supervisor talks informally to our riders, tells them of their aspirations and problems. Whether you always agree with these men or not, there is something mighty fine about the unselfish work they are doing for all of us out on these vast acres. Personally, we do not wish to add to that ranger's problems as he works to serve all the various uses and users. It is our belief that a majority of people in the country feel the same way.

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A Trail Rider Takes a Stand

(From page 44)

First of all, it is unnecessary. The national parks are already closed to any but recreational uses and their boundaries are set by laws already in force. The wild life refuges are true sanctuaries under the laws creating them. The wilderness and similar areas in the national forests are already established by law and are well administered. Passage of S. 4013 would be an affront to the bureaus presently administering the lands under their jurisdiction. Its proponents apparently presume these bureaus to be either incompetent, too independent, or too weak to withstand outside pressures. Setting up a special council as a watch dog, superimposed on the present administering bureaus, is not good legislation, nor would it make for better administration. Proposals for changing boundaries and use privileges could still be made, but would have to face a predominantly biased committee before they would reach Congress. And Congress would be put in a bad position by having to act on what should be an administrative decision. The provision that a proposal for changes would take effect only if either house of Congress passes no resolution opposing it, is a unique way of handling business but a bad one. One can be certain that the council would be enthusiastic about additions but cold to eliminations of area.

Second, before Congress acts upon a bill of this kind, it should first investigate, or have investigated, the propriety and validity of the present boundaries of all federal land units, including existing wilderness areas, national forests, national parks and wild life refuges. It is quite possible that some changes should be made in the interest of the public welfare.

Third, conservationists interested principally in recreation have been quite articulate in behalf of multiple use on the national forest and private forest lands, but violate the multiple-use philosophy for other lands. Multiple use, if properly ap-

plied, would strike such a ratio of uses that the major one would have precedence and be left virtually unimpaired. On many of the wilderness areas, a careful application of multiple use management should be permitted.

Fourth, the exclusion of all road building would limit use of the wilderness areas to a select few, and even these few would be unable to enjoy them when they have passed their more vigorous years and reached the time of more leisure for enjoying wild areas and more need for spiritual uplift. It is selfish to ask every taxpayer to foot the bill for wilderness areas and permit only a few to benefit. Roads into some areas are out of the question either because of terrain or because they would cause inordinate damage, but for others, roads of the dead-end type stopping right at or just inside the wilderness boundary would not injure the wilderness characteristics and would give thousands of people a chance to participate in their enjoyment. The Humphrey Bill is too inflexible. Population increases, unless steps are taken for their control, are such that eventually the public pressure will be too great to resist. What has happened to Yosemite Valley is likely to happen to the more desirable wilderness areas. Some existing areas are so large—over 500,000 acres—that an inordinately large area is closed to all but a select few.

Fifth, supporting this bill is bad policy for wilderness enthusiasts. They have already been so excessive in their demands, so intemperate in their criticism of others, that they have aroused antagonisms which, in turn, jeopardize recreation development in general. Making enemies of the groups they should have cultivated has been a penchant of foresters for 50 years. It has never worked to their advantage; it is less likely to work for recreationists.

Finally, if the wilderness areas are actually in jeopardy, under their present administration, it would seem that the proper remedy is the bolstering of the agencies now responsible for their administration. Much as I personally want to see the wilderness preserved, S. 4013 is not the way to do it. It would create serious animosities outside of government and much confusion, duplication and strife among the bureaus.

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AFA BY-LAWS CHANGED

THE Board of Directors of the Association, meeting in La Plata, Maryland, September 30, 1956, made certain amendments in the By-Laws.

The principal change was to create five Regional Vice Presidents whose responsibility will be to represent and promote the Association in their respective regions. They shall perform such duties as are assigned to them by the President or the Board of Directors, the five regions to be determined from time to time by the Board. These Regional Vice Presidents will be selected by the Board of Directors and the five regions are as follows:

1. *Northeastern Region*, including the states of: Maine, New Hampshire, Vermont, New York, Massachusetts, Connecticut, Rhode Island, Pennsylvania, New Jersey, Maryland and Delaware.
2. *Southeastern Region*, including the states of: West Virginia, Virginia, North Carolina, South Carolina, Georgia, Florida, and the District of Columbia.
3. *Southern Region*, including the states of: Kentucky, Tennessee, Alabama, Mississippi, Louisiana, Arkansas, Oklahoma and Texas.
4. *Central Region*, including the states of: North Dakota, South Dakota, Nebraska, Kansas, Minnesota, Iowa, Missouri, Wisconsin, Indiana, Illinois, Michigan and Ohio.
5. *Western Region* including the states of: Washington, Oregon, California, Nevada, Idaho, Utah, Arizona, Montana, Wyoming, Colorado, and New Mexico.

Other changes are as follows:

ARTICLE III, Sec. 2—Members and Dues. Reference to the special Subscribing Membership rate of Ten Dollars for two-year memberships was deleted because elsewhere the By-Laws give specific authority to the Board to create special membership rates. Subscribing Membership dues remain at Six Dollars a year. However, this special two-year rate continues as part of the Association's program. In Sec. 4 the word "defer" is added in order to give the Secretary authority to postpone dues payments at his discretion.

ARTICLE IV, Sec. 2 — Board of Directors. The phrase "Directors" has been substituted for "any officer" to clarify the fact that the membership has the opportunity of voting for Directors only. All other officers are selected by the Board of Directors.

In the same Sec. the word "distribute" has been substituted for the word "mail" which would enable the Association to change the method if desirable of placing ballots in the hands of the membership.

The President of the Association is also given authority to name a Committee of Tellers to count ballots. Previously this Committee was appointed by the Association's Committee on Elections.

In line with the recent reorganization of the Association's staff the title "Executive Vice President" was substituted for "Executive Director" throughout the By-Laws.

Also, in line with the reorganization the title of "Chief Forester" was substituted for "Forester" throughout the various sections of the By-Laws.

ARTICLE XI, Sec. 1 — Local Representatives and Affiliated Organizations. In connection with the designation of representatives of the Association throughout the country the phrase "regions of the United States" was substituted for "portions of the United States."

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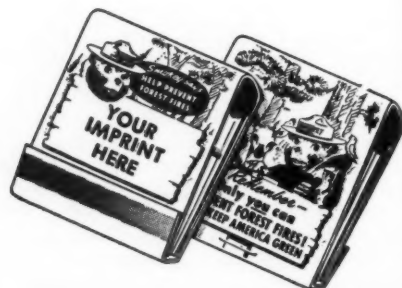
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Up roar on Klamath Reservation

(From page 21)

of the forest on a high-yield level.

IV.

What of the Indians? What is their attitude toward termination?

There are 2,095 persons on the tribal rolls, of whom 1,150 live on the reservation. Every man, woman, and child is entitled to a share of the communal assets. Since rough estimates place the value of the timberland at \$80 million, each stands to acquire \$40,000 if all the communal property were sold. It is this opportunity to get a lot of money that is the chief inducement to withdraw.

The Stanford Research Institute survey showed that the younger Indians generally will choose to withdraw, while the older folk feel they cannot leave an area where they were born and spent all their lives. Many of the Indians, however, are confused. About 45 percent of those interviewed had made up their minds, but the remainder was not yet sure what they would do. At least a third mistakenly thought they could both stay in the tribe and sell their share of the tribal property. The older people were generally vague about the meaning of termination. They want to continue to receive a good income from tribal lands, without working it, enjoy all the hunting and fishing privileges, have access to government services, and still gain their freedom.

There is a sharp divergence in attitude among members of the tribal council. Some do not believe the Klamaths are ready to take on the management of their own affairs. Only about 60 percent of the Indians have had a high school education, and a substantial proportion no more than a grammar school education. A relative handful went beyond high school.

According to a Klamath Agency report: "The Indians on the Klamath Reservation are receiving a very poor education. The chief difficulty is the attitude of the people. Lack of education is reflected in the scarcity of skilled workmen and the total absence of professional people. Education is the yardstick by which we measure the ability of any people to make their way in our complex society, and it is unfortunate that the Klamath people do not nearly measure up to their non-Indian neighbors."

Boyd Jackson, a member of the tribal council, succinctly summarized

the attitude of many leaders when he told a *Wall Street Journal* reporter: "Our people are less prepared to manage their own affairs today than 40 years ago; we need more time." If termination is not postponed, he added, "it will throw the Klamath tribe into chaos and the members in the poor house."

On the opposite side are the views of Wade Crawford, ex-superintendent of the Klamath Agency and member of the tribal council. At a hearing in Portland on October 30, 1956, he charged that the Bureau of Indian Affairs was dilatory in carrying out the termination act and that "the management specialists have done everything they could to disrupt the tribe."

An objective student of the Klamath problem, Professor L. S. Cressman, head of the Anthropology Department of the University of Oregon, argues that the law terminating federal control is a forced social change which will suddenly destroy a pattern of life in existence since 1865. The Klamath Indian, he says, faces an emotional crisis in the shift

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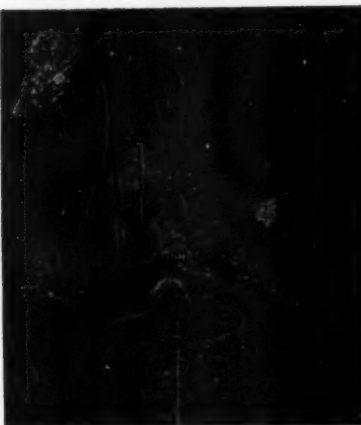
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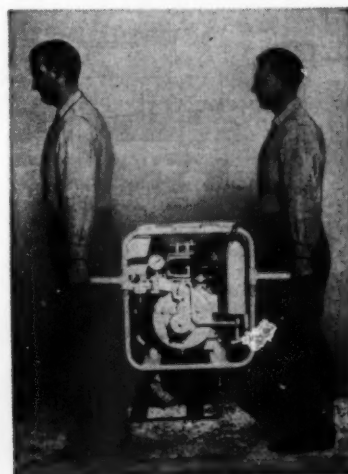
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from wards of the government.

"Reassurance must be given the people that they are not being victimized and the community into which they must be absorbed as equals must actively participate in helping them to provide the basis for hope and reassurance."

V.

Those who know the Klamaths well generally believe that termination should not be rushed. They predict that many Indians, when they receive their share of the tribal property, will not invest it wisely but drink and gamble it away and wind up—as one Klamath Falls businessman says—on the county relief rolls. According to the SRI survey, those people who plan to take a cash settlement for their equity have definite plans for using their money but do not feel quite so confident about their neighbors. More than half of them said that other Indians would waste the money, would not hold on to it, etc.

The BIA meanwhile is proceeding with plans to meet the termination requirements. On August 13, 1956, it opened a relocation office in Klamath Falls where Indians can get advice on termination. The bureau is encouraging them to go to the big cities—Los Angeles, San Francisco, Denver and Chicago—where there

are fairly large concentrations of former Reservation Indians from all parts of the United States.

VI.

While the BIA has not yet formulated the amendments it will suggest to PL 587, as requested by Secretary Seaton, Democratic congressmen in Oregon have already made it clear they will push for remedial action to avoid a catastrophe both to the Indians and the pine-clad forests.

Senator Neuberger has indicated that he is ready to sponsor the necessary changes in PL 587 that would allow government acquisition of the lands in order to guarantee sustained-yield operation of the forest, perhaps by turning them over to the Forest Service. Many Forest Service people favor such a solution to the problem.

One thing is certain. The dilemma which the Klamaths face will be reviewed by Congress in the next session. There is almost unanimous agreement that PL 587 was enacted rather hastily and without due consideration of its ramifications to both the people and the land. It will be up to Congress and the Department of the Interior to work out a solution that meets with the human and conservation requirements.

When Forests Floated Away

(From page 31)

into a fever of building activity when spring freshets seemed imminent. Even this method had its headaches on occasions when unexpected high water carried off vast stocks of waiting timber or of freshly fashioned rafts, destroying at one blow a whole winter's labor and a whole season's hope of cash income.

To prevent such mishaps raftmen usually hovered anxiously around the river at times of thaw or deluge, watching each inch of the water's upward climb. When it reached the required height whole communities were abruptly emptied of their men and boys as word went out that now was the time for heading down river. Even church services were not immune; more than once a preacher saw his congregation vanish in mid-sermon as news seeped through that the crucial moment had come.

There was a quick stocking of giant dinner boxes with the bread, butter, cheese, baked beans, boiled eggs, boiled ham, doughnuts, molasses cake, and other sustaining vict-

uals which wives and mothers had been preparing for the past several days; a hurried grabbing of augers, cant hooks, ropes, wedges, axes, and pike poles; and the equipping of each raft with the large jug of whisky which shared with the dinner box the place of honor at the base of the "shirt pole" amidships.

What might happen to a raft, once it was given its head, was anyone's guess. The gamble was part of the lure. It might speed through from headwaters to Trenton in four days, or it might fall victim en route to the manifold hazards of wind and fog, shoals and snags, rocks and rapids, ice and ever-shifting currents. Most humiliating of all, perhaps, was the raftmen's occasional discovery that the promising high water which had set them on their way was in reality only a "scrub fresh" which they soon outran. This meant grounding, of course, and a tedious wait for high water which might not come for weeks, if then. Yet crews which chose to sit out such waits in

riverside hotels sometimes had rude awakenings when sudden downpours or flash floods tore their grounded craft free and hurtled them downstream unmanned. Conversely, a raft tied up overnight in a comfortable eddy might find itself grounded in the morning by an unforeseen drop in the river level.

Runaways and groundings comprised only a small fraction of the raftmen's misadventures. They might be "stove up" against a bridge pier; they might run afoul of a log boom, an eel rack, or a ferry cable; they might find themselves circling helplessly in a "suck"; they might lose an oar (or even an oarsman) through the kickback of an ill-aimed dip in falls or rapids; they might dive under churning water or smothering ice at a treacherous dam or rift; they might be blown onto rocks by storms; they might pile up, one raft atop another, to create a splintered hodgepodge which required several days to untangle. Or they might pull through all the hazards of nature practically unscathed, only to become victims of some such man-made hazard as the steersman's devotion to his whisky jug.

Many a famous steersman had a fabulous reputation as a gargantuan drinker, but with the forehands a drunken steersman was often considered a safer boss than a sober one because he was not so nervous about the dangers to be overcome. On several recorded occasions, however, a steersman's excessive liquid build-up of courage caused him to pass out at crucial junctures, leaving his oarsmen to carry on without him. This could lead to serious disaster, for a man might be a crackerjack oarsman for many years without ever mastering the exceptionally intricate technique of steering, which was a fine art traditionally passed on from father to son.

A steersman had to know *everything*: what barn or tall tree to use as his "point" in shooting around a bridge pier, what rock portended trouble if it showed above water, whether to "pull Pennsylvania" or "pull Jersey" of a curve to avoid grounding, what ledge or landmark to aim for in sidling shoreward for an overnight tie-up, what changes had occurred to the channel since last year's trips.

Yet all the dangers of rafting were, in the eyes of its devotees, as nothing compared with its delights: adventure, companionship, change of scene, escape from home routine, and, to top it all, good hard cash. Added to

these were the breathtaking thrill of shooting rapids at a thirty-mile-an-hour speed, the enjoyment of never-settled feuds with "canallers" and railroaders encountered along the way, the easygoing hospitality of the riverside hotels, and the big blow-outs at Easton or Trenton or Philadelphia to which all hands were traditionally entitled when at last their rafts had been marketed. And perhaps the greatest delight of all, as so often happens with traveling, was to be found in the homeward journey.

Before the days of railroads, this homebound trip was really a major challenge, involving many days of hard walking, but after the railroads' coming it became a crowning touch for men who otherwise would have had scant excuse for traveling—a crowning touch even in cases where the nearest rail line was a fifty-mile hike from home. Now the men were grateful for all those railroad bridges which only a few days before they had been heartily cursing as major river hazards. And when they got home to the farms they would talk endlessly of the sights they had seen when they changed trains in New York, and of the way they had outsmarted and outfought the city loaf-

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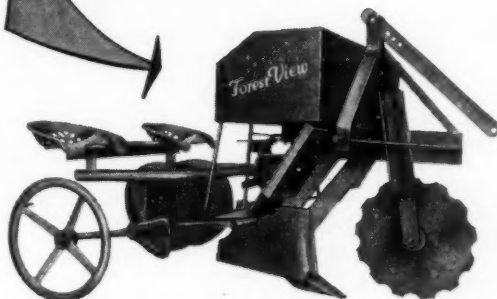
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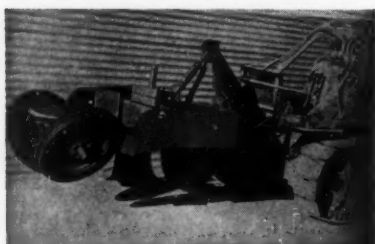
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ers who, egged on by their backwoods appearance, had spotted them as easy marks ripe for a fleecing.

The raftmen might outsmart the city slickers, but they could not outsmart nature. For nearly a hundred and fifty years they kept hacking away at their once seemingly inexhaustible source of supply until, when the twentieth century dawned, such timber as was left in the Delaware watershed was too scrubby to interest downriver markets. A few die-hard oldtimers kept on making the trip for a half-dozen additional years, more for nostalgic reasons than for any real hope of financial gain,

but it was no use. A raft is strictly a one-way vehicle, and by 1903 or so it and the way of life it bred had reached the point of no return along the Delaware quite as irretrievably as had that green steersman of the post-Civil War period who made the mistake of trying to float around the wrong side of one of the river's manifold islands. Half-way round, as rocks and shallows threatened ahead, he was hailed from the shore by an agitated farmwife who ran along the bank yelling "Go back! Go round t'other side! Rafts can't get through here!"

The lady's advice was of little use. Rafts, like time, do not turn back.

Summer Homes on Wheels

(From page 26)

did things go orderly. Newly developed by the Forest Service, Shady Rest is a model campground. Trailer spaces, paved and numbered, are laid out with plenty of room between individual camps. The ground is level and not adjacent to a lake or stream. At the entrance a large sign board shows the roads and locations of each trailer site. Self-registering, camp occupants put their names on cards and slide them into containers next to their numbers on the sign.

But on that busy summer weekend in 1955, Shady Rest quickly filled up. Inyo National Forest Supervisor Wilfred Davis worried about the overcrowding in the other trailer camps and especially the public health problem. California requirements for trailer court sanitation and those of the U. S. Public Health Service do not permit trailers where they cannot be connected to a sewage system. A few thoughtless trailer campers had dumped raw sewage and garbage into the lakes and streams, not only endangering the water supply of the camp grounds, but the small towns in Owens Valley and Los Angeles, which ultimately uses the water from most of Inyo National Forest.

Davis requested a health survey by the U. S. Public Health Service. The formal report underlined Davis' worst fears: "Eliminate as soon as possible all trailers from Forest Service developed camping areas. . . . Construct controlled camps to support tent campers only."

The alternative was to construct adequate drinking water systems and piped waste disposal arrangements. Preliminary estimates for Inyo Na-

tional Forest soared to over \$1,000 per trailer unit—some \$1,500,000—plus the cost of running the sanitary facilities. Out of the question!

With the health survey report in one hand and the streams of trailers flooding into the national forests in the other hand, Forest Service officers pondered the dilemma. Public campgrounds belong to everyone and trailer owners would seem to have equal rights with tent campers. One solution might be to lease trailer parking concessions to private interests on national forest land as the National Park Service often does on its land. But, as some of these potential operators point out, as long as the Forest Service continues to admit trailers free to public campgrounds, private operators cannot compete—especially with the short summer season.

Although most people will pay a small fee for campsites, large families with modest incomes—those who depend the most on public campgrounds for vacations they can afford—object. Others dislike the regimented camping a fee imposes. The state of California Park System charges \$1.00 a day for trailers and provides sanitation facilities, but campers cannot bring pets, no fire wood can be gathered, and campers must register and be checked out. To some, this means loss of the open space freedom they have come to the woods to find.

In some places tent campers have shown a willingness to pay. Existing campgrounds have been leased to people who operate them for profit. In Plumas National Forest at Buck's Lake, California, a daily fee of 75 cents covers camp upkeep and

assures a modest profit. At Lake-shore, in the Shasta-Trinity National Forest, another leased camp accommodates both trailers and tents for a 75 cent fee and is in its third year of operation.

Rustic camping was the original intent of Forest Service campgrounds and Mr. Average Man who prefers his camping old-fashioned—with a pup tent and a small fire—is often scared out or crowded out by the trailers. Some owners of meandering mansions demand two camp spaces instead of one. Others bring gasoline generators to run their electrical equipment and keep the whole camp awake with noise. A selfish few connect pipelines to the camp faucets and pipe water directly into their trailers. Trees, shrubbery, and log barriers around camp spaces are often damaged by drivers inexperienced at maneuvering the big trailers.

Forest Service Rangers use state trespass laws to haul away unoccupied trailers so that waiting campers can have their turns, but all of the complications of trailers camping make extra work. And the campgrounds don't look like they used to. They're too crowded, too dusty, too mechanized, too noisy—just too civilized.

Mr. Average Man may want his children to know what it's like to sleep out under the stars and to rough it a bit. He likes to cook his fish over a campfire and sack out in a sleeping bag, but every year it's tougher to find a quiet camping place.

In 1956, Senator Hayden of Arizona asked the Forest Service to submit a ten-year program to the House Appropriations Committee covering all recreational needs, similar to the National Park Service's "Mission 66" plan. The program is complete but not yet available for release. In the meantime, available recreational plans for California estimate \$3,473,000 for new construction in national forests during the next five years. This includes 5,789 new rustic camp and picnic units. A 1,000-acre picnic area was just finished at Balwin-Pope Beach at Lake Tahoe, Eldorado National Forest. Huntington Lake in Sierra National Forest has new permanent summer home sites. Twelve new chair ski lifts and 54 new winter sports areas are under construction. These include Mt. Shasta in the Trinity-Shasta and Chinese Peak in the Sierra. Mammoth Mountain's and Heavenly Valley's ski lifts opened last year. The

former had 1,000,000 man days use the first year.

Meanwhile trailers are in trouble in Eldorado National Forest. Because of continued stream pollution, Placer County officials have posted all turn-out spaces along the edge of Lake Tahoe and the American River with a new ordinance: "No Trailer Parking or Stopping." Since the rugged Eldorado has but two public camps that trailers can get to, this leaves them with almost nowhere to go except the resorts which are booked months in advance.

Last week a new trailer arrived at Shasta Lake near Redding, California. Designed to slide easily from its wheeled base into the water, it provides the owner with a 42-foot elegant summer palace on pontoons. This houseboat is only the beginning. Trailer manufacturers, whose business jumped 35 per cent last year, have dozens of new designs, among them a standard width model with walls that expand hydraulically.

Ultimately the National Park Service, the Forest Service, state park officials, city planners, and trailer manufacturers will have to work together to thrash out the questions of our expanding trailer population.

The problem is no longer small.

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2-yr. Seedlings, 3" to 6"	\$25.00
2-yr. Seedlings, 4" to 8"	35.00
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AUSTRIAN PINE per 1000
3-yr. Seedlings, 4" to 8" \$35.00
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NORWAY SPRUCE—Fast Growing per 1000
Seed collected by our men from selected trees.

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Many other Evergreens, Ornamentals, Shade Trees

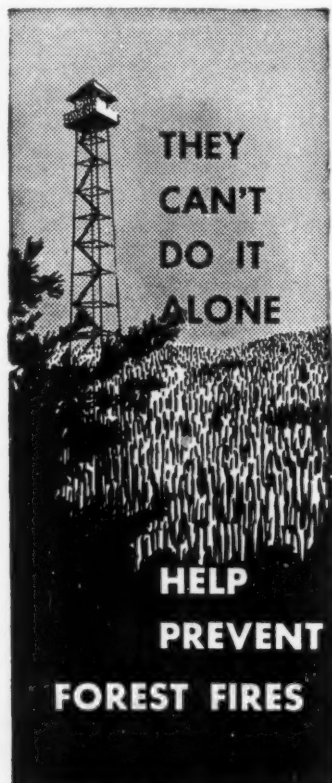
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Heavy Roots and Sturdy Tops of Musser Quality Seedlings compared with Ordinary Seedlings.

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Musser trees grow and thrive where others fail to survive—because of Careful Selection of Seed, Good Heredity, Scientific Propagation and Spraying, Musser trees are healthy. Heavy roots, sturdy tops assure rapid growth.
There is as much difference in trees as in common and purebred livestock. Don't waste money on inferior stock.

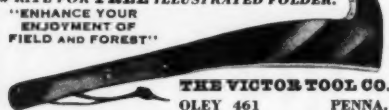
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ANNUAL MEETING OF

The American Forestry
 Association

Lorraine Hotel
 Madison, Wisconsin

SEPTEMBER 30 - OCTOBER 3,
 1957

Forest Service Annual Report

(From page 14)

gizes 600 hydroelectric powerplants, and is the major support for 21 million acres of irrigated farmland, the condition of these watersheds is of tremendous importance. The Forest Service is trying to improve these conditions and to work out national forest-municipal watershed plans.

Managing national forest lands for grazing, providing wildlife habitat and recreational facilities have become increasingly important. The Forest Service has prepared plans and begun studies on a service-wide method of analyzing grazing allotments, and is trying to maintain wildlife populations at a level consistent with the requirements for other uses of the land. To ease the burden on over-taxed recreational facilities, in 1955 the Congress increased appropriations for this purpose, but the increase in the number of recreation visitors have kept ahead of the improvements that can be made.

In controlling fires on national forests, the Forest Service reports that because of expanded use of aircraft, improved fire equipment and fire-weather forecasting, greater skills and other progress, less than one percent of the fires burned more than 100 acres in 1955.

Forest Service cooperation in state and private forestry continued to yield mutual benefits. State supervision and training of service foresters continued to improve as more states added staff supervisors to work in the program. Cooperation with county Agricultural Conservation Program Service offices expanded as more states assumed responsibility for checking compliance on ACPs forestry practices. Pulp companies cooperated with service foresters in better cutting practices. And, in 38 participating states, 34,828 landowners, controlling 2.9 million acres were given assistance. This cooperative program also includes pest control, tree planting, watershed protection and flood prevention, and fire control and prevention.

Forest management research was expanded in 1955 according to the report. Projects are underway to develop superior trees, improve planting techniques, and devise better methods of managing and harvesting the forest crop. A monograph on planting southern pines, and a bulletin on managing northern hardwood forests were issued.

In watershed management re-

search, the Hubbard Brook Experimental Forest, established in the White Mountains of New Hampshire especially for watershed studies, offers the opportunity to apply soil-forest-water conservation principles and practices to highly important water-source areas and thereby increase basic knowledge. Experimental watersheds are also being operated in Ohio, Utah, North Carolina and California.

"Operation Firestop," concluded in California this year, was aimed specifically at developing aids to combat mass fires and in pointing the way toward additional forest fire research needed. Another project in fire research, the cloud inventory phase of the Forest Service's cooperative lightning study, Project Skyfire, continued actively in Montana, northern Idaho, and California.

Methods were developed for reducing drought impact on southwestern desert-grassland ranges through the service's range management research.

Increased Congressional appropriations materially strengthened research on bark beetles and aerial survey methods both in the East and West, the report stated. Findings in forest insect research studies included: aerial application of virus spray to control forest insect infestation; benzene hexachloride to counter the southern pine beetle; aerial photography to evaluate mortality caused by Douglasfir bark beetle; a Jeffry-Coulter pine hybrid resistant to pine reproduction weevil; and, DDT in fuel oil as an effective termite soil poison.

At the Forest Products Laboratory at Madison, Wisconsin, new products and additional uses for wood were developed. One new product, whose full value is still to be ascertained, is a fiberboard that affords protection from all known chemical and biological warfare agents and, to some degree, from radiological agents. New uses for low-grade material have been developed, such as acoustical material from white-pocket Douglasfir and good sulfate and groundwood pulps from pole-blighted western white pine.

Receipts and deposits for the Forest Service in 1955 totalled \$82,342,146, while expenditures amounted to \$74,647,903.

"The Forest Service is in sound condition," Chief Forester McArdle concludes, "and its morale is high."

Industry's Good Turn

(From page 4)

give each troop something to work toward in the form of a Conservation Award of Merit. This includes troop awards and also individual scout achievement awards. To keep troop progress straight, the kit provided a large conservation progress chart with space for the names of troop members and the conservation requirements from tenderfoot to Eagle Scout, the various conservation-type merit badges and special conservation projects.

The kit, probably the most comprehensive thing of its type ever prepared, included instructions on how to use the conservation progress chart, how to qualify and apply for the Award of Merit, how to conduct a loggers field day script for a Boy Scout forestry forum for radio and television, a bibliography of forestry and forest industry materials for Boy Scouts, forestry games for scout meetings and campfires, a one-act play on fire prevention and control "Reunion on the Fire Line," suggested troop projects, and tips to the scoutmaster.

Next began the big job of distribution, and for the first time every Scout Council in the nation was reached by packets of industry-prepared materials. A total of 97,000 kits were prepared, and as of last report 86,505 had been sent to all 48 states and the territories.

Applications for the Conservation Award of Merit to be awarded by the president of AFPI show that this program is reaching pay dirt. For example, Troop 3, of New Castle, Pa., Dan H. Ryan, scoutmaster) reports that it has now completed reforesting a strip-mine area totaling 50 acres. This troop planted 40,000 pines, cleared another 30-acre plot of underbrush and posted 100 forest fire prevention signs. Thirty-six boys in a Jackson, Mississippi, troop reports that it concentrated on a series of exhibits stressing the damage caused by forest fires. Another troop built a series of wood duck houses. Yet another constructed two small dams.

Last month, AFPI got its own "Award of Merit" for a job well done. Following Mr. Gillett's report to the Boy Scout Conservation Council, member Lloyd Partain moved that the council warmly applaud the industry organization for its effort. The motion was seconded by Don P. Johnston, president of The American Forestry Association.

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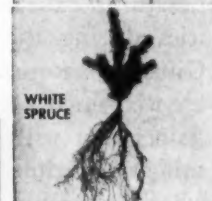
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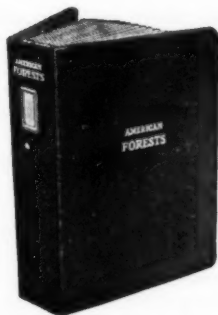
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Following is a paragraph suitable for incorporation in wills:

"I hereby give, devise and bequeath _____ to The American Forestry Association, Washington, D. C., a non-profit District of Columbia corporation, or its successor, or successors, for the purpose of promoting the corporate activities of said Association."

THE AMERICAN FORESTRY ASSOCIATION

919 Seventeenth Street, N.W.
Washington 6, D. C.

Preston Takes Issue With Talks at La Plata

(From page 6)

ing was really applicable to only one-fourth of the small holdings? If all those speakers, and the many foresters they represent, are right in thinking that no distinction need be made between farm forestry and non-farm forestry, that fact should be easy to determine. Some unbiased agency could take a census of farmers to determine what they understand about farm forestry and what their attitude towards it really is. From their answers, we could tell whether or not our present efforts in teaching forestry practices to farmers is taking root, growing, and bringing forth the fruit of a permanent forestry activity or is it simply enabling farmers to get a little money out of the merchantable timber in their woodland with no understanding of a permanent annual income from a farm wood crop? I know of no agency in a better position to take such a census with the help of our consulting foresters than The American Forestry Association.

One state forester spoke out, in answer to a questionnaire, and told about the farmers in a great agricultural state, and what they knew about farm forestry. Here is his statement. I am not at liberty to disclose his name or the state he represents but it indicates the kind of census I have in mind.

1. What is the general attitude of farmers towards their woodlands?

Unfortunately, most farmers still look upon their woodlands as a piece of "brush land" that isn't paying its way in taxes. It is for this reason that they have allowed them to be abused through fires, grazing, and destructive cuttings. They still unfairly compare timber lands to corn fields, pasturelands, and the like; and, since they don't give similar yields, the thought of cutting and conversion is ever uppermost. I can say, though, that I have seen a marked turn for the better with increasingly more farmers appreciating their woods, its periodic returns, and the type of land it deals with, and its multitude of intangible returns such as recreation, wildlife, beauty, water and soil stability and the like. This number is small but it is getting larger.

2. Do the farmers consider the growing of a wood crop as part of their farm business? If they do not, why?

The majority of farmers do not yet consider timber growing as part of their farm business. The main reasons, to me, would be the long time element between harvests and (timber income), the comparative low return *per acre per year* (as compared to corn, beans, etc.), the dark cloak of suspicion and uncertainty still wrapped around timber-selling and sawmill men in general, the farmer's usual complete ignorance of the timber part of his farm, and the more pressing need for a farmer's time and attention with his other fields and projects. It sort of reflects back to the fact that this state is known for its corn, hogs, etc. certainly, not for its timber.

3. Have the farmers generally investigated the possible return they could get from their woodlands if properly managed?

NO, in spite of the efforts of a multitude of forestry agencies and programs such as Extension, Soil Conservation Service, Farm Advisors, the USFS, Division of Forestry, etc., most farmers are still completely unaware of the excellent potential in growing a timber crop. They also aren't aware that free technical forestry services are available to them *individually* to help them on their own personal woodland projects. We feel that forestry is in the neophyte stage; and while progress is being made, it is slow.

4. Do farmers generally permit livestock to graze their woodlands?

Yes, over half of the woodlands are today being grazed by cows, hogs, sheep, turkeys, chickens, horses and last week I saw goats ruining a timberland. More grazing is encountered in the northern sector of the state where more intensive livestock farming is practiced.

5. How do farmers sell their trees? Just big trees; part big ones and some smaller trees?

Most timber sales are still sold on the basis of the buyer getting and cutting everything he can use. This usually results in hi-grading which leaves all the poor-quality trees of all sizes and a large number of the smaller undesirable species like elm, hickory, post oak, etc. Most sales are lump sum. To offset this, our program encourages two things:

- 1) Sell trees of *all species when ripe*. This brings into play

(Turn to page 71)

Washington



Lookout

By ALBERT G. HALL

THE RESIGNATION OF CLARENCE A. DAVIS, UNDERSECRETARY OF INTERIOR, is looked upon by many persons as the beginning of the end of the Administration's partnership policy in power development. Actually the end of active promotion of the policy began with the resignation of Secretary Douglas McKay. It was further hastened along by McKay's defeat by Senator Wayne Morse in the Oregon Senate race. With the rough treatment given Wesley A. D'Ewart by the Senate Committee on Interior and Insular Affairs when D'Ewart's confirmation was being considered by that committee still fresh in the minds of the Administration, it is inconceivable that the President will propose as a successor to Davis anyone who will vigorously support private power development. McKay, Davis and D'Ewart had been closely associated with the so-called "give-away" charges leveled against the Administration. One by one, they have been eliminated from Interior top-side. On Davis' shoulders rests the legal decision made by him in settling the Al Sarena mining claims in Oregon. The pattern developed in Interior lends credence to the belief in Washington, D. C. that the partnership approach to power development, under which local and private interests were encouraged to take the initiative in hydroelectric projects, may be played down during the 85th Congress. A new policy statement, either by the President or by Secretary of the Interior Fred Seaton is anticipated early in January.

A SOFTENING OF POLICY IN RELATION TO HYDROELECTRIC PROJECTS, however, does not necessarily mean an abandonment of the Administration's basic approach to river development. Rather, it may be looked upon as recognition that the policy, however sound, has not been sold to the voter. It is also an indication that the Administration has been alarmed by Republican losses in the public lands states. Proponents of public ownership and of greater federal activity in natural resource development will be encouraged into action by the expected policy changes as well as by the November election returns. Defenders of states' and individual rights in conservation matters may have to be more alert than usual to avoid a further swing to federalist concepts. As of today, public belief in federal ownership and management of resources is on the upgrade in the nation and especially in the West.

EVERYONE PROFESSES TO SUPPORT CONSERVATION as an objective. Any proposal purporting to be a conservation measure wins widespread support among the public and among the members of Congress, regardless of party affiliations. With a probable softening of the Administration's private enterprise and states' right policies, it becomes increasingly important that conservation proposals be given close scrutiny to see that they do not constitute popular bandwagons for subtly inserted and hidden objectives. The functions of the federal government have been permitted to become so many and so complex that one cannot expect Congress to understand clearly the implications of many of the measures placed before it.

HOLDOVER LEGISLATION, THAT INTRODUCED IN THE 84TH CONGRESS, and scheduled for reintroduction in the 85th, will include the proposed National Wilderness Preservation System which has been receiving forum treatment in AMERICAN FORESTS. Senator Humphrey of Minnesota and Representative Saylor of Pennsylvania have

(Turn to next page)

both announced that the bill will appear early in January. Another Humphrey bill, that proposing price reporting of forest products as a function of the federal government is also scheduled for reappearance. Since many states have already embarked on forest products price reporting programs, the need for federal activity in this field may be more imagined than real.

RECREATION, PARTICULARLY IN THE NATIONAL FORESTS, will receive greater emphasis than heretofore. The Park Service is well under way with its Mission 66 designed to meet the growing demands of recreationists. Similar demands are being made for development of the many areas of recreational land reserved for that purpose within the national forests. The budget for Fiscal Year 1958 is expected to include substantial increases for recreation and wildlife management. The organizations chiefly concerned with recreation seem to have developed increased strength and confidence as a result of the defeat of the Echo Park Dam, and as a result of the November elections. To a degree at least, the wilderness bill, mentioned above, is a test of their political position. In addition to an increased budget for recreation and wildlife development, it is expected that further attempts will be made to establish multiple use as a policy of the Congress and to earmark receipts for these purposes. Representatives of state game and fish departments met with wildlife specialists of the Forest Service in December to review plans for cooperative projects to improve wildlife habitat in national forests and, in general, to meet the increased demand for more hunting and fishing in those areas.

THE TERMINATION OF FEDERAL TRUSTEESHIP OVER THE KLAMATH INDIANS and their property, directed by the 83rd Congress, is likely to be delayed by amendments to the legislation. The problem facing the Bureau of Indian Affairs and the management specialists, now attempting to develop appraisals and a program for granting the Indians fee simple title to the lands and resources of the Klamath Reservation, is one of protecting both the Indians' interest and that of the public generally. It is feared that relinquishment of federal control may result in accelerated liquidation of the timber resources. Federal purchase of the Klamath assets has been advanced as a solution. It is unlikely that the first session of the 85th Congress will be able to arrive at a practical scheme for federal acquisition. (For a more detailed examination of the Klamath situation see Mr. Netboy's article on page 20.)

OTHER BILLS LIKELY TO REAPPEAR IN THE 85th CONGRESS are: the proposal by Senator Long of Louisiana for state studies of public and private land ownership patterns; a revised bill patterned after that introduced in the 84th Congress by Representative Hope of Kansas to rewrite the basic authorities of the Forest Service and bring them up to date; and another bill, patterned after that by Representative Laird of Wisconsin, to require more definitive reports on federal timber management. (Incidentally, the Forest Service recently published an annual report for 1955. Reports had been discontinued in 1953 as an economy.)

NO NEW LEGISLATION IS ANTICIPATED ON THE FARM FRONT. The Soil Bank measure, with its forestry aspects tied into the Conservation Reserve, will probably be given another year trial run before any substantial changes are made in it. While there is pressure for increased price supports for farm commodities, it is believed that these will be successfully resisted, at least early in the Administration, and every attempt will be made to make the Soil Bank prove out.

STATES RIGHTS HAS BECOME AN ISSUE IN THE CONTROVERSIAL MCGEE BEND DAM. Readers will recall that the Congress approved the construction of the McGee Bend Dam in east Texas, despite considerable opposition and despite certain uneconomical features of the proposal. The dam, if built, will inundate some 129,000 acres, mostly timberland. Construction of the project, however, has not gone ahead. In November, the Neches River Conservation District filed suit against the division and district engineers, asking the court to enjoin the Corps of Engineers from making a 50-year water release contract with a downstream agency. The NRCD has a permit from the state water board for comprehensive development of the Neches and Angelina basin, using local financing. The Corps and the downstream agency it proposes to serve do not have a state permit. The river is wholly intra-state; the question is whether the local people may be permitted to develop their own water resources or whether the job must be done by the federal government.

Preston Takes Issue With Talks at La Plata

(From page 68)

factors like size, species, products, condition of trees, etc. We help farmers herein when we mark such trees with paint for proper harvest.

- 2) Sell by the unit of measure which in this case is the board foot. Corn goes by the bushel, hogs by the pound, eggs by the dozen, and similarly timber by the board foot, either standing tree or log scale.

I would like to quote from the remarks of Mr. Liming, the Extension Forester from Versailles, Indiana, as reported on page 18, AMERICAN FORESTS, November 1956.

"The alarming fact to me is that we estimate that less than 10 per cent of our Indiana woods crop is well managed. At least 50 per cent of our woods in Hoosierland are still being destroyed by domestic livestock grazing, our greatest forest

enemy throughout the hardwood region. Of the small woodland owners who do protect their crop from grazing and fire, only a very few practice good management. Generally there are two classes of owners—the preservationist who can not harvest a mature or ripe tree because it is too beautiful, or the liquidator who sells by the 20 or 40 acre block."

What Mr. Liming says about the status of farm forestry in Indiana, can be duplicated in many other states. Surely these farmers need a few foundation garments of wood crop and farm economy before we try to clothe them with the silks and satins of silviculture. They need first to accept the fundamental concept of wood as a farm crop. This is the root of the problem, and about this, the speakers at the AFA meeting were silent.

Wilderness Issue

(From page 42)

If the first interpretation is correct it would mean logging, watershed protection, grazing, wildlife and wilderness on every acre, although not necessarily equal uses for all. If the second interpretation is correct it would mean multiple use by land classification, wherein a part of the forest would be used primarily for timber production, another part primarily for watershed protection, another primarily for grazing, still others primarily for wildlife and others again for wilderness areas. In every instance in this latter interpretation at least one or more uses would be compatible, but not all on every acre.

Multiple use does not mean an equality of uses, but it cannot be practiced without some rather broad concepts of land classification. Too many specialized land managers fail to understand what the term "land classification" implies.

If the budget figures of the Forest Service can be used as an indicator, they do not bear out the multiple use philosophy. In fact, comparison of the budget figures of the Forest Service indicates that we are not getting multiple use and that wildlife and recreation are almost "accidental uses."

I doubt that anyone would argue that the lion's share of the national forests should now be classified for

timber production and watershed protection, with other uses taking a well-ordered secondary place on these lands so classified; but by the same token other lands of less forest productivity could be classified as recreational or wilderness which would be compatible with wildlife and watersheds. True multiple use on the public domain including the national forests is a long way from being a fact; specialists practicing land management have a penchant for practicing their own specialties.

Continuing to be alarmed about the goblin of locking up resources can only imply a lack of faith in the wilderness concept, and with it the ghost of future timber shortages. The citizens of the United States cannot today justify many of the present uses of its timber resources. This is also true of many of the minerals, which are non-renewable. Until citizens develop higher standards of civic responsibility arguments about timber shortages and other resources are fallacious.

On the other hand, does the AFA believe that Congress, in case of a national emergency, would fail to make these timber reserves available for the public need? Who under the stress of a legitimate and nationally recognized emergency would object?

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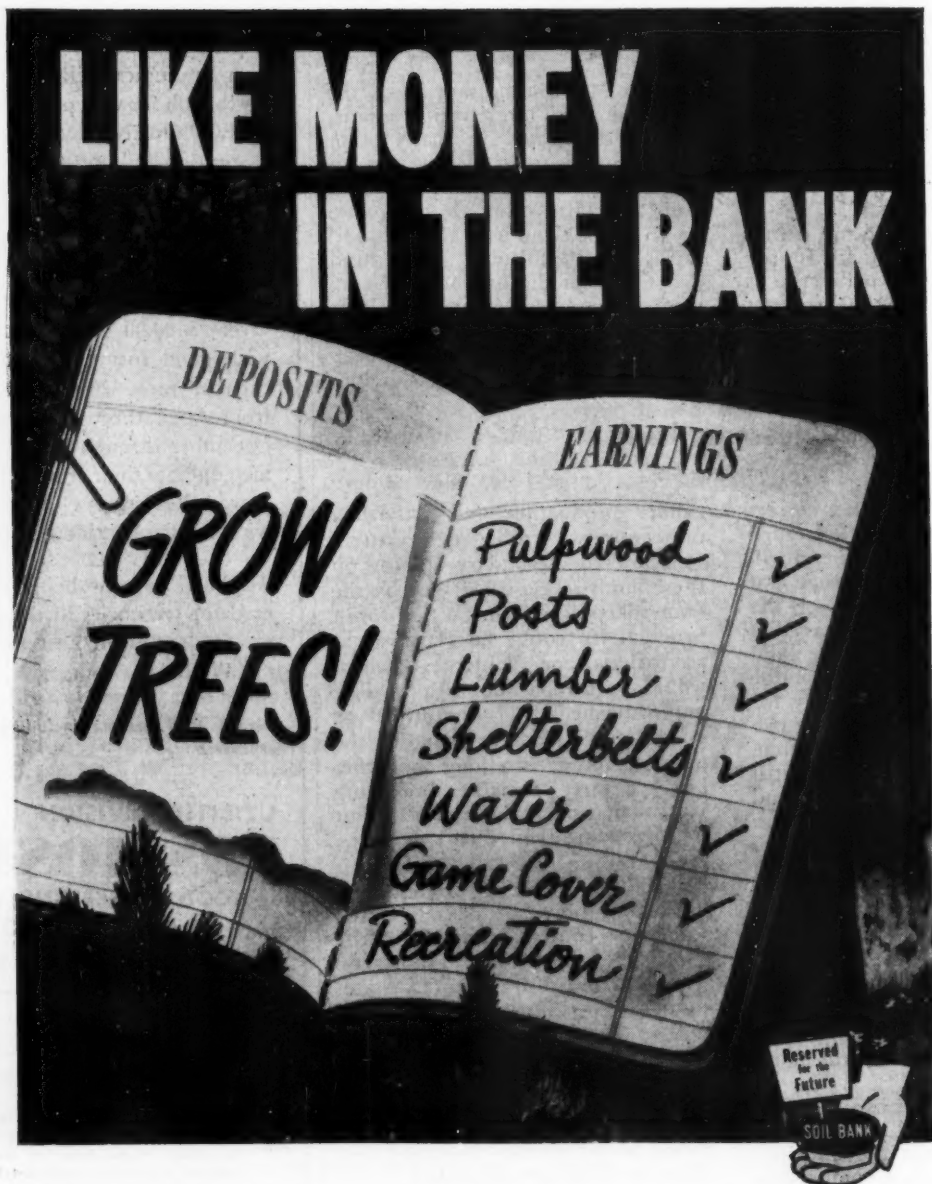
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This poster is being distributed by the Department of Agriculture to stimulate interest in the Soil Bank Program. Under this program the local Agricultural Stabilization and Conservation Committees will provide information on contract terms in these areas, the local public forester will provide technical help and the local county agent will assist farmers in making best use of these services.

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JOHN W. OLIVER

Thompson Falls, Montana. This company has a contract to construct 18 miles of main haul road from Graves Creek to Vermillion River, with grades up to 5% on one side of a 6200-foot divide and up to 9% on the other side. In rocky, stumpy going, the D9 is pioneering ½ mile of 14-foot road per 8-hour day. Here's a report from co-owner John W. Oliver:

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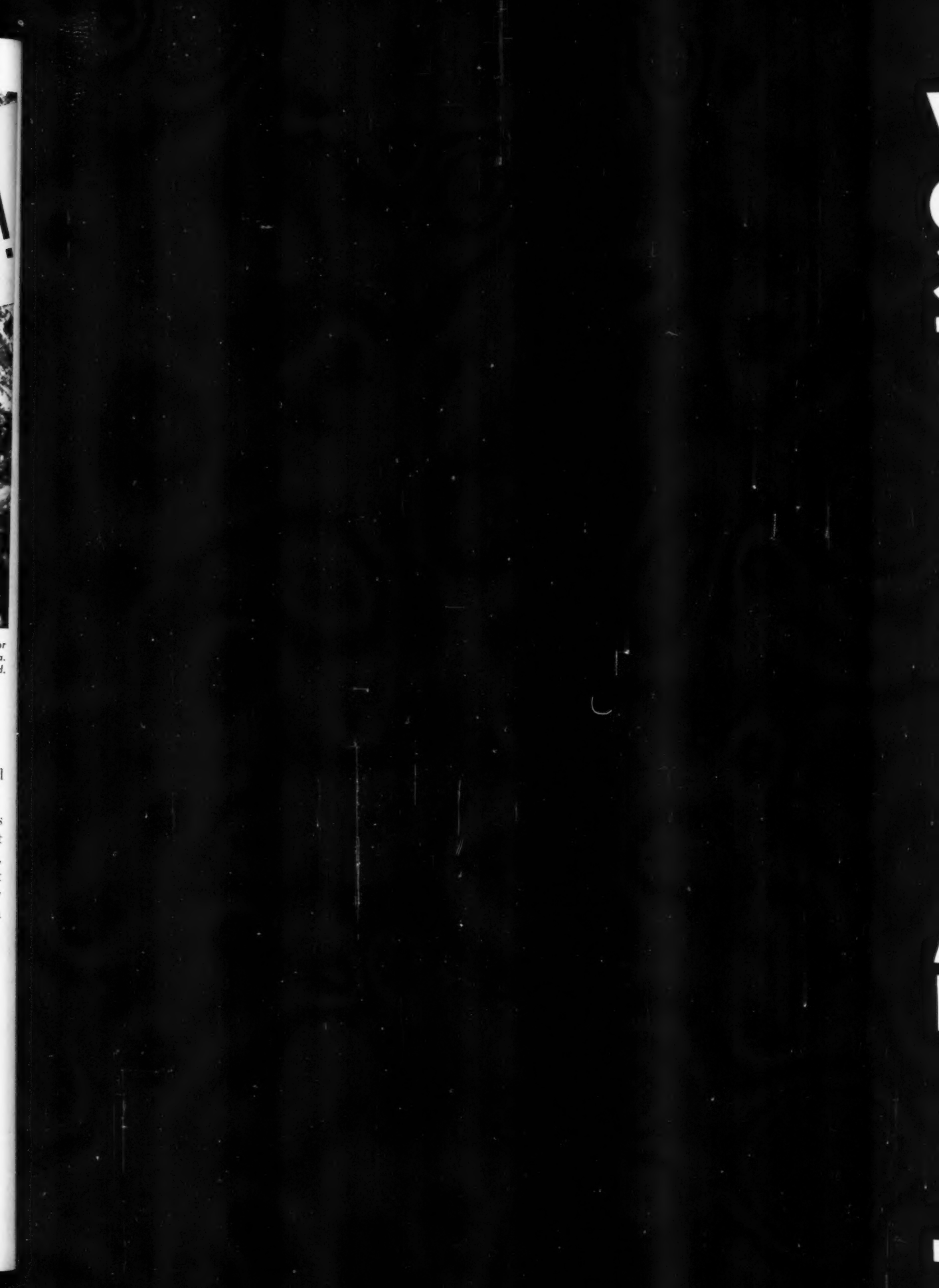
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